


RB184,621

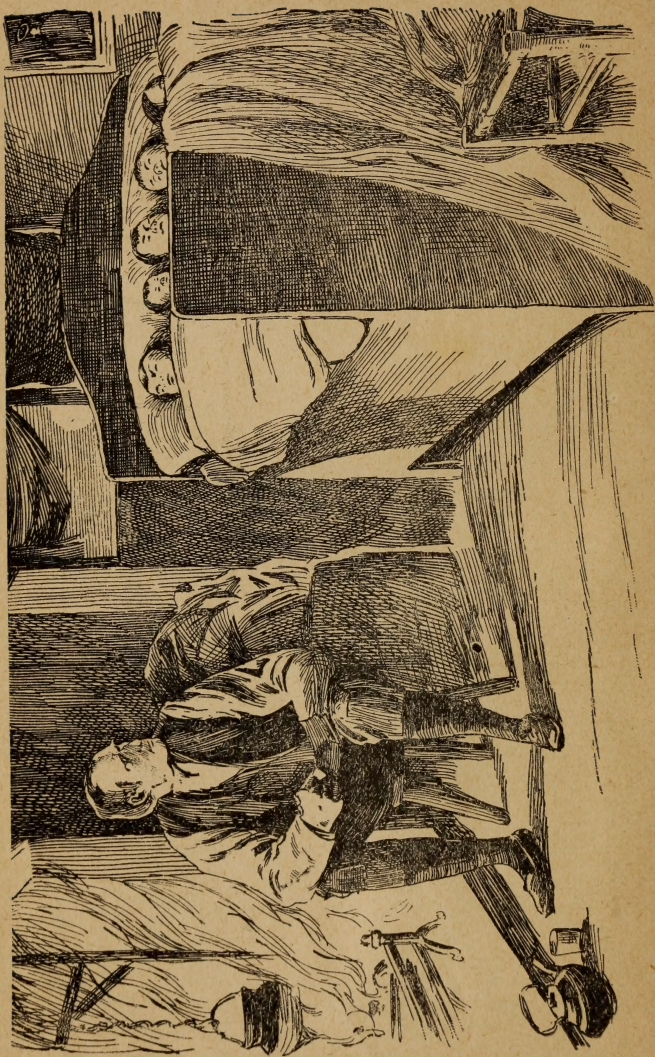


Presented to the
LIBRARY *of the*
UNIVERSITY OF TORONTO
from
the estate of
J. Stuart Fleming

Wm. A. Harrison
July 1896



Digitized by the Internet Archive
in 2015



MOTHER AWAY FROM HOME.

THE
HOUSEHOLD GUIDE
OR
DOMESTIC CYCLOPEDIA.

HOME REMEDIES FOR MAN AND BEAST;
A COMPLETE RECEIPT BOOK.

Home Nursing and Home Treatment;
Insect Extermination;

PROF. HENKEL'S ILLUSTRATIONS OF
THE EFFECTS OF ALCOHOL & CIGARETTES;
CARE OF CHILDREN;
HOW TO COOK FOR THE SICK, ETC.

—BY—
PROF. B. G. JEFFERIS, M. D., Ph. D., Chicago, Ill.,
AND
J. L. NICHOLS, A. M.

ALSO,
A COMPLETE COOK BOOK,
—BY—
Mrs. J. L. NICHOLS.

FIFTEENTH EDITION.

PUBLISHED BY
J. L. NICHOLS & CO.,
33 RICHMOND STREET WEST, TORONTO, ONT.,
To whom all communications must be addressed.

SOLD ONLY BY SUBSCRIPTION,

1895,

THIS VOLUME

will be promptly sent, in cloth postpaid, on receipt of \$1.00,
if directed to the address at the foot of the title page, when
you know of no agent in the vicinity.

No copies sold at less than above price, except in lots to
active agents.

AGENTS WANTED.

Entered, according to the Act of the Parliament of Canada, in the year
one thousand eight hundred and ninety-four, by JOHN A. HERTEL, at the
Department of Agriculture, at Ottawa.



THE GOOD SAMARITAN.

*Health and the simplest fare. If thou hast these,
Accompanied with one single steadfast friend—
A conscience which thou dost not fear to bare
To the Great Seacher's eye—and that strong hope
Whose wing ne'er tires, e'en o'er the yawning grave,
Go thou thy way; thou art an Emperor,—
Bearing thy crown e'er with thee; go thy way
And thank thy God, who hath bestowed on thee
The gold which monarchs count, but oft in vain.*

PUBLISHER'S PREFACE.

The object of this volume is, to instruct every housekeeper and every owner of domestic animals in the use and application of simple domestic remedies. It may be properly called a book of *Self Instruction* in the art of home doctoring. This work has been especially written to benefit and bless suffering humanity everywhere. The language is simple, and technical terms have been carefully omitted, and the book itself makes up a complete series of Home Lessons in Medicine, which can be read and understood by all classes. There has been rapid progress in the science of medicine in the past few years. Old methods and old receipts have been replaced by new remedies and new methods of application. So it is especially necessary in these times of progress, to have a book which is up to date and abreast of the times.

There are many plants on every farm, in every garden and there are many simple remedies in every home, and other harmless remedies, which can be easily secured, which will relieve pain and cure disease. Simple home remedies and good nursing in ordinary cases, will do more good and give quicker relief than the best practicing physician can with his strong drugs and periodical visits. The most skillful physician can benefit the patient but little without good care and careful nursing in the home. Consequently nursing and caring for the sick is a prominent feature in this work.

This book seems to fill a long-felt want. There have been many books published on medicine, and placed in the hands of the inexperienced homekeepers, but they are not safe guides for anyone to follow, who is unskilled in the art of compounding medicine. Strong drugs are dangerous and their use in the Household Guide is largely discouraged, for they are not safe in the hands of the common people without the direction of a physician. In serious cases of sickness the family physician should always be summoned, but remember that nine-tenths of the ills that afflict mankind can be cured by careful nursing and the application of simple and safe home remedies, and those who secure the Household Guide, will find it ever helpful in giving good counsel in sickness and a safe guide in health.

J. L. NICHOLS.

Naperville, Ills.



GUARDIAN ANGEL.

A COMPLETE MEDICAL DICTIONARY.

- Abdomen**—The lower front part of the body.
- Abnormal**—Unhealthy, unnatural.
- Abortion**—A premature birth, or miscarriage.
- Abrasion**—Bruising and consequent rubbing off of the skin.
- Abscess**—A cavity containing pus.
- Acetate**—A salt prepared with acetic acid.
- Acidity**—Sourness.
- Aconite**—*Aconitum Napellus* Monk's Hood.
- Acrid**—Irritating, biting.
- Adipose**—Fatty.
- Adult**—Person of full growth.
- Albumen**—Constituting the chief part of the white of eggs.
- Aliment**—Any kind of food.
- Alimentary Canal**—The entire passage through which food passes; the whole intestines from mouth to anus.
- Alternative**—Medicines which will gradually restore healthy action.
- Alteratives** change in some unexplained way the conditions and functions of organs.
- Amenorrhea**—Absence of menses.
- Anæsthetics**—Medicines depriving of sensation and suffering.
- Anemia**—An impoverished state of blood. Bloodlessness.
- Anodyne**—A medicine which will allay pain.
- Anodynes** allay or diminish pain.
- Antacids**—Remedies for acidity of the stomach.
- Anthelmintics** kill or expel worms.
- Antidote**—A medicine used to counteract poison.
- Antiphlogistic**—Remedy for Fever and Inflammation.
- Antiperiodics** obviate the return of a paroxysm in periodic diseases.
- Antiscorbutic**—A remedy for scurvy.
- Antiseptics** prevent, arrest or retard putrefaction.
- Antisialagogue**—Remedy for Salivation.
- Antispasmodics** prevent or allay cramps.
- Antisyphilitic**—Remedy for Venereal Diseases.
- Anus**—Circular opening or outlet of the Bowels.
- Aperient**—A gentle laxative or purgative.
- Aperients** gently open the bowels.
- Aphtha**—Thrush. Infant's sore mouth.
- Aqua**—Water.
- Aqua Ammonia**—Water of Ammonia.
- Aromatic**—Spicy and fragrant drugs; used to prevent griping of drastic purgatives.
- Aromatics**—Strong-smelling stimulants which dispel wind and allay pain.
- Arsenic**—A metal, commonly called ratsbane.
- Astringents** cause contraction of vital structures. Used in Diarrhea, Whites, etc.
- Auscultation**—Act of listening to sounds in any part of the body.
- Bacteria**—Infusoria, Microscopical insects, supposed to cause many diseases.
- Balm**—Aromatic and fragrant medicine, usually an ointment.
- Balsam**—Resinous substances, possessing healing properties.
- Basilicon**—An ointment containing wax, resin, etc.
- Belladonna**—Name of the plant, night shade.
- Bergamot**—Oil extracted from the citrus bergamia.
- Benzoin**—Balsamic resin from styrax benzoin.
- Bile**—A secretion from the liver.
- Bilious**—Caused by, as bilious fever. An undue amount of bile.
- Bolus**—A large pill.
- Bronchia**—Branches of the wind-pipe.
- Bronchitis**—Inflammation of the bronchial tubes, which lead into the lungs.
- Butyric Acid**—An acid obtained from butter.
- Calamus**—Sweet flag.
- Calcareous Deposit**—Stone or gravel found in the bladder, gall ducts, kidneys, etc.
- Calenduline**—Mixture of calendula and cosmoline.
- Callous**—A hard bony substance or growth.

- Capillaries**—Hair-like vessels for conveying the blood from the arteries to the veins.
- Capsicum**—Cayenne pepper.
- Carminatives**—Warming stimulants (Aromatics.)
- Catarrh**—Flow of mucus from the nose or other parts of the body.
- Cathartic**—A drug that increases the action of the bowels.
- Cathartics** freely open the bowels.
- Catheter**—Tube for emptying the bladder
- Caustic**—A corroding or destroying substance, as nitrate of silver, potash, etc.
- Cellular**—Composed of cells.
- Cervix**—Neck.
- Cholagogues** increase the secretion of bile.
- Chronic**—Of long standing.
- Citric Acid**—Acid made from lemons.
- Cohosh**—Black snake root. Squaw root.
- Collapse**—A sudden failing of the vital powers.
- Coma**—Stupor. Lethargy.
- Congestion**—Over-fullness of blood vessels.
- Contagious**—A disease which may be given to another by contact.
- Constipation**—Costiveness.
- Contusion**—A bruise.
- Convalescence**—Improvement in health.
- Cuticle**—The outer or first portion of the skin, which consists of three coats.
- Datura Stramonium**—Thorn-apple, jimson, etc.
- Decoction**—Preparation made by boiling.
- Defecation**—To go to stool.
- Demulcent**—Mucilaginous, as flax seed and gum arabic.
- Demulcents** sheathe and protect irritated surfaces.
- Dentition**—Act or process of cutting teeth
- Dentifrice**—A preparation to cleanse the teeth
- Detergents**—Cleansing medicines, as laxatives and purgatives.
- Diagnosis**—The art of discriminating disease.
- Diaphoretics**—Medicines which aid or produce perspiration.
- Diaphoretics** cause perspiration.
- Diaphragm**—Midriff.
- Diarrhœa**—Looseness of the bowels
- Diluent**—A substance that dilutes or thins liquid.
- Diluted**—Reduced with water, as dilute alcohol, half alcohol and half water.
- Diphtheria**—A malignant membranous disease of the throat.
- Discutient**—A medicine which will scatter or drive away tumors.
- Discutients** dispel enlargements.
- Disinfectants** destroy infecting matter.
- Diuretic**—Causing increased discharge of urine.
- Diuretics** increase the secretion of urine.
- Dorsal**—Having reference to the back.
- Douche**—A dash or stream upon any part.
- Drachm**—Sixty grains, a teaspoonful.
- Dyspepsia**—Difficult digestion.
- Dysuria**—Difficult or painful urination.
- Ebullition**—Boiling.
- Ecbolics** cause contraction of the womb.
- Eclectic**—The act of choosing, selecting.
- Eclectic Physician**—One who professes to be liberal in views and independent of medical schools.
- Effervesce**—To foam.
- Effete**—Worn out, waste matter.
- Efflorescence**—Redness of the general surface; eruption.
- Electuary**—Medicine prepared in the consistence of honey.
- Elixir**—A tincture prepared with more than one article.
- Emetic**—Medicines which produce emesis, vomiting.
- Emetics** are medicines which cause vomiting.
- Emmenagogue**—Remedy that promotes the menstrual discharge.
- Emulsion**—Mucilage from emollients.
- Enceinte**—Pregnant.
- Enema**—An injection by the rectum.
- Ennui**—Lassitude, dullness of spirit, disgust of condition, etc.
- Enteritis**—Inflammation of the intestines.
- Epidermis**—Outer skin.
- Epilepsy**—Convulsions, fits, with loss of sense for the time, and foaming at the mouth.

Epistaxis—Nose-bleed.

Ergot—Smut-of rye. A poisonous fungous growth.

Eructation—Raising wind from the stomach, belching.

Eruption—Pimples or blotches on skin or pustules from small-pox.

Escharotic—That which will destroy the flesh.

Ether—A volatile fluid.

Eustachian Tube—A tube leading from behind the soft palate to the drum of the ear.

Evacuation—The act of discharging by stool.

Evaporation—Conversion of a liquid into vapor.

Exacerbation—Violent increase in disease.

Exanthemata—Rash or eruption on the skin, as in small-pox, scarlet fever, measles, etc.

Excoriation—A chafing or abrasion of the skin.

Excrement—The feces, that which passes by stool.

Excrescence—An unnatural growth.

Exhalant—Giving off fumes.

Expectorant—Tending to produce free discharges from the lungs or throat.

Expectorants increase the secretions from the air tubes.

Excision—The cutting out, or cutting off any part.

Extremity—Applied to the arms and legs.

Extirpation—The complete removal of a part.

Extract—To take out, as a tooth, to extract a ball or any foreign substance from a wound.

Extravasation—A collection of a fluid in a cavity, or under the skin, outside of its proper vessels.

Farcy—A disease of the lymphatic vessels in the skin of the flanks of a horse.

Fallopian Tubes—Tubes from ovaries to uterus. Oviducts.

Farina—Meal or flour from vegetables.

Fauces—The upper part of the throat.

Febrile—Having reference to fever.

Febrifuge—Medicines to drive away fever, producing perspiration.

Febrifuges counteract fever—lower temperature.

Feces—Discharge from the bowels.

Felon—A deep abscess of the finger.

Femur—The thigh bone.

Femoral—Relating to the thigh.

Ferment—To effervesce, to work, as emptyings, beer, wine, cider, etc.

Fermentation—The process by which the above work of fermenting is carried on by nature or art.

Ferrum—Iron.

Ferri Limatura—Iron filings, very valuable in female debility and for males of weak habit of body.

Fetal—Pertaining to the fetus or child in the womb.

Fetus—Child in the womb after the fifth month.

Fibre—A very small thread-like substance of animal or vegetable matter.

Fibula—The smallest bone of the leg below the knee.

Filter—To strain through paper, made for that purpose.

Fistula—An ulcer having a sinuous external opening.

Flaccid—Flabby, soft, relaxed.

Flatulence—Gas in the stomach or bowels.

Flatus—Collection of wind or gas in the stomach or bowels.

Flooding—Uterine hemorrhage.

Fluor—An increased discharge, a flowing, flux.

Fluor Albus—White flow, leucorrhea, whites, etc.

Fluoric Acid—A fluid obtained from the fluor spar cut with sulphuric acid.

Flux—Diarrhea, or other excessive discharge.

Formula—Medical prescription.

Fumigate—To smoke a room, or any article needing to be cleansed.

Function—The particular action of an organ, as the function of the stomach, liver, lungs, etc.

Fundament—The anus.

Fundus—Body.

Fungus—Spongy flesh in wounds, proud flesh, or a soft cancer.

Fusion—The act of melting by heat.

Galbanum—A resinous gum from a genus of plants.

Galipot—A glazed jar, used for putting up gummy extracts or ointments.

Gall—Bile.

Galla—The gall-nut, an excrescence found upon the oak.

Gall Bladder—A bag which receives the gall, or bile, through ducts, from the liver, delivering it to the stomach.

Gallic Acid—An acid from the nut-gall.

Gall Stones—Hard bilfary concretions found in the gall bladder.

Galvanic—Having reference to galvanism.

Gamboge—A drastic purgative, unless combined with aromatics.

Ganglion—A knot, or lump on tendons, ligaments, or nerves.

Gangrene—The first stage of mortification.

Gaseous—Having the nature of gas.

Gastric—Of or belonging to the stomach.

Gastric Juice—Secretion of the stomach.

Gastritis—Inflammation of the stomach.

Gastrodynia—Pain in the stomach, sometimes with spasm.

Gelatine—Isinglass.

Gelatinous—Like jelly.

Genitals—Belonging to generation, the sexual organs.

Gentian—A European root, possessing tonic properties.

Genu—The knee.

Genuflexion—Act of bending the knee.

Genus—Family of plants, a group, all of a class or nature.

Germ—The vital principle, or life-spark.

Gestation—Period of growth of child in the womb.

Gleet—Chronic gonorrhea.

Globules—Small round particles, having special reference to particles of the red part of the blood.

Glossa—The tongue.

Glossarist—A writer of glosses or comments.

Glossitis—Inflammation of the tongue.

Glottis—The opening of the wind-pipe, at the root of the tongue, larynx, covered by the epiglottis.

Gluten—Vegetable Fibrine, existing in farinaceous grains.

Glutton—One who eats excessively.

Gonorrhea—An infectious discharge from the genital organs.

Gout—Painful inflammation of the joints, especially those of the toes, or of the fingers.

Granule—A small particle of healthy matter, not pus.

Granulation—Healing up of an ulcer or wound by filling up with healthy matter.

Gravel—Crystalline sand-like particles in the urine.

Griping—Grinding pain in the stomach, or bowels.

Gustatory—Pertaining to taste.

Gutta Percha—Dried juice of a genus of trees *Isonandra gutta*.

Guttural—Relating to the throat.

Gymnasium—A place for sportive exercise.

Gypsum—Sulphate of lime, more commonly called plaster of Paris.

Hema—Blood, prefixed to other words.

Hematemesis—Vomiting of blood.

Hematuria—Hemorrhage from the bladder or urinary passages.

Hemoptysis—Hemorrhage from the lungs. Literally : Spitting of blood.

Hemorrhoids—Piles. Tumors in and about the anus.

Hereditary—Transmitted from parents.

Hernia—Rupture which permits a part of the bowels to protrude.

Herpes—Disease of the skin. Tetter.

Hiera Picra—A medicine containing aloes and canella.

Humeral—Pertaining to the arm.

Humerus—The single bone of the upper arm.

Humors—The fluids of the body, excluding the blood.

Hydragogues—Medicines which remove water from the system; used in dropsy.

Hydrargyrum—Metallic mercury, quicksilver.

Hydrastis—Golden seal, yellow root.

Hydrocyanic Acid—Prussic acid, nothing more poisonous.

Hydrofluoric Acid—Same as fluoric acid.

Hygeia—Health.

Hygiene—The art of preserving health.

Hypoglottis—Under part of the tongue.

Hysteria—A nervous affection, marked by alternate fits of laughing and crying, with a sensation of strangulation.

Hysteritis—Inflammation of the uterus.

- Ichor**—An acrid, biting, watery discharge from ulcers or wounds.
- Icterus**—Jaundice, a bilious disease, which shows yellowness of the eyes and skin.
- Icterus Albus**—Chlorosis, whites, etc.
- Ignition**—Set on fire, from state of being Ignis, fire.
- Ileus**—Colic in the small intestines.
- Iliac**—Situated near the flank.
- Iliac Region**—Sides of the abdomen between the ribs and the thighs.
- Imbecile**—One weak of mind.
- Imbibe**—To absorb, to drink.
- Imbricate**—To over-lap, as tiles on a house.
- Immobile**—Immovable, as stiff joints.
- Imperforate**—Without a natural opening.
- Impervious**—Closed against water.
- Impotence**—Sterility, inability to produce.
- Impregnation**—The act of reproducing.
- Incision**—The cutting in with instruments.
- Incontinence**—Inability to hold the natural excretions.
- Incubation**—The hatching of eggs, slow development of disease.
- Indication**—That which shows what ought to be done by physician.
- Indigenous**—Peculiar to a country, or to a small section of country, applied to a disease, plants, etc.
- Indolent**—Slow in progress, applied to ulcers and tumors, which are slow with but little or no pain.
- Induration**—Hardening of any part of the system by disease.
- Infectious**—Communicable from one to another, as disease.
- Infirmity**—Place where medicines are distributed gratuitously to the poor.
- Inflammation**—Disease, attended with heat, redness, swelling, tenderness, and often with throbbing.
- Inflatus**—Collection of wind or gas, as in the stomach, bowels, etc.
- Influenza**—A disease affecting the nostrils, throat, etc. of a catarrhal nature.
- Infusion**—Medicines prepared by steeping in water, without boiling.
- Infusoria**—Microscopical animals.
- Inguinal**—Belonging to the groin.
- Ingredient**—One article of a compound mixture.
- Inhalation**—Act of drawing in the breath.
- Injection**—Any preparation introduced into the rectum or other cavity by syringe.
- Insanity**—Derangement of the mind.
- Introversion**—State of being turned inward.
- Inspiration**—The act of drawing in the breath.
- Inspissation**—Thickening by boiling, to make what is called the concentrated extracts.
- Instinct**—An involuntary action, as closing the eyelids, breathing, etc., natural perception of animals.
- Insomnia**—Sleeplessness.
- Integument**—A covering, the skin.
- Intercostal**—Between the ribs.
- Intermission**—Time between paroxysms of fever or other disease.
- Intermittent Fever**—Fever which comes on at regular periods.
- Interosseous**—Between the bones.
- Interval**—The time between paroxysms of periodical diseases, as ague, etc.
- Intestines**—Contents of the abdomen.
- Inversio Uteri**—Inversion of the uterus.
- Inversion**—Turning inside out.
- Irreducible**—Applied to hernia, and to joints which have been put out and cannot be put back to their place.
- Ischuria**—Inability to pass the urine.
- Issue**—Sore made as a counter-irritant, to draw irritation from a diseased part.
- Itch**—Scabbies. A catching eruption of the skin accompanied by severe itching.
- Itis**—An addition to a word denoting inflammation, pleuritis, pleurisy, etc.
- Ivory Black**—Animal charcoal.
- Jaundice**—A disease caused by the inactivity of the liver or ducts leading from it.
- Jesuits Bark**—First name of peruvian bark, from its having been discovered by the Jesuit missionaries.
- Jugular**—Belonging to the throat.
- Jujube**—A fruit growing in Southern Europe, something like a plum, used in coughs.

Kali—Potash.

Kelp—Ashes of sea-weed.

Labia—Lips.

Labia Pudendi—Lips or sides of the vulva.

Labial—Of, or belonging to the lips.

Laboratory—A place of chemical experiments or operations.

Lancinating—Sharp, piercing, as lancinating pains.

Laryngeal—Of the larynx.

Laryngitis—Inflammation of the throat.

Larynx—The upper part of the throat.

Latent—Hidden, as Latent heat. See the remarks connected with steam boiler explosion.

Lassitude—Weakness, a feeling of languor.

Laxative—Remedy increasing action of the bowels.

Leptandrin—Active principle extracted from the leptandria virginica, black root, Culver's physic.

Leucorrhea—Fluor albus, whites, chlorosis, etc.

Ligature—A thread of silk or other substance, to tie arteries, etc.

Lingua—The tongue.

Lithontriptic—A medicine reported to dissolve gravel or stone in the bladder.

Lithotomy—The operation of cutting, to take out stone of the bladder.

Livid—Dark colored, black and blue.

Loins—Lower part of the back.

Lotion—A preparation to wash a sore.

Lubricate—To soften with oil, or to moisten with fluid.

Lute—A paste with which to close chemical retorts, the casein, curd of milk is used for that purpose.

Lymph—A thin colorless fluid carried in small vein-like vessels, called lymphatics.

Mal—Bad, malpractice, bad practice, not according to science.

Malformation—Irregular, unnatural formation.

Malaria—Bad gases, causing disease, supposed to arise from decaying vegetable matter, also the disease itself.

Mamma—The female breast, which is composed of glands, that secrete the milk.

Mastication—The act of chewing.

Masturbation—Excitement, by the hand, of the genital organs.

Maturity—Ripeness, having arrived at adult age, beyond further growth.

Materia—Matter, healthy substance.

Materia Medica—The science of medicine, and the medical combinations.

Maturation—The formation of pus. The act of maturing.

Meconium—The first passage of babes after birth.

Medicated—Having medicine in its composition.

Membrane—A thin skin-like lining or covering.

Metritis—Inflammation of the womb.

Medicinal—Having medical properties.

Medullary—Like marrow, brain-like.

Menstruation—Monthly flow.

Median—The middle.

Mellifluous—Flowing as with honey, sweet, delicious.

Menorrhagia—Profuse menstruation.

Micturition—Urinating, passing the urine.

Midwifery—Art of assisting at childbirth.

Miscible—Capable of being mixed.

Minimum—The smallest, the smallest dose, the opposite of maximum.

Morbid—Unhealthy.

Morbus—A disease; hence cholera morbus, a disease of the bowels.

Mucus—Fluid, secreted by mucous membranes.

Muriatic—Having reference to sea salt.

Muriatic Acid—Acid, prepared from common salt, often called hydrochloric acid.

Muscle—Bundles of fibres, producing motion in animals.

Muscular—Having reference to the muscles, strongly built.

Myrrh—A resinous gum.

Narcotic—Stupefying, producing sleep.

Narcotics allay pain and produce sleep.

Nasai—Of the nose.

Nausea—Sickness of the stomach.

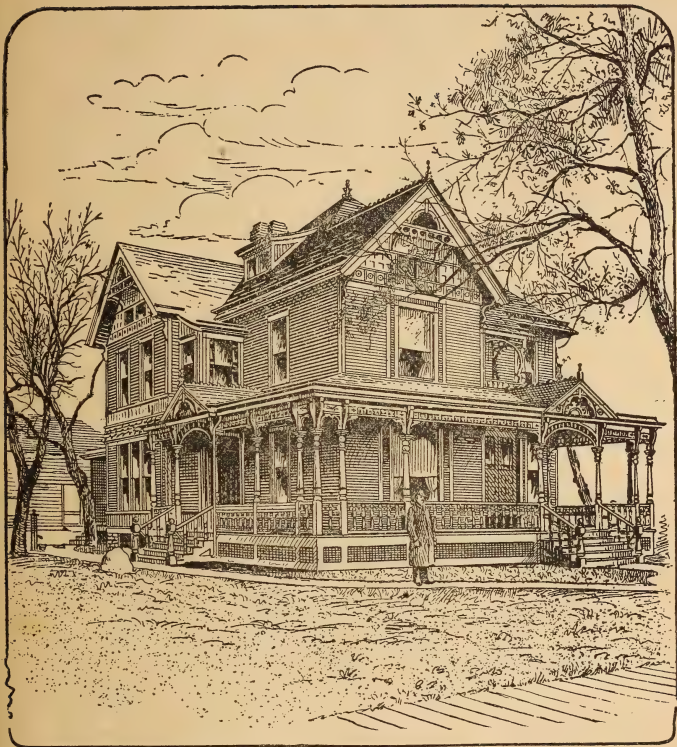
Nauseant—That which produces nausea.

Navel—Centre of the abdomen.

- Necrosis**—Death of a bone.
Nephritis—Inflammation of the kidneys.
Nervine—That which will allay, or soothe nervous excitement.
Nervous—Easily excited.
Neuralgia—Pain in nerves.
Nisus—Effort, attempt, to expel anything from body.
Nitrate—Nitric acid combined with alkalies or alkaline salts.
Nitre—Saltpeter.
Nocturnal—Occurring in the night.
Nosology—The classification of diseases.
Nostrum—A quack preparation, usually of the patent order.
Nudus—Nude, without clothing.
Nucleolus—A central granule or spot within a nucleus.
Nutrition—Nourishment.
- Obesity**—Corpulence, excess of fat, or flesh.
Obstetrics—The science of midwifery.
Ochre—An ore of iron.
Oculist—An eye doctor.
Oculus—The eye.
Oleaginous—Oily.
Omentum—The caul, peritoneal covering of the intestines.
Ophthalmia—Disease of the eye, inflammation of the eye.
Ophthalmos—The eye.
Organic—Pertaining to produce by organs.
Organized—Furnished with life.
Orgasm—The closing excitement of sexual connection.
Orifice—An opening.
Os—Mouth as of the womb, or uterus.
Osseous—Bony.
Ossification—Formation of bone; from os, a bone.
Ostalgia—Pain in the bone.
Osteoma—Tumor of a bone.
Ostitis—Inflammation of a bone.
Otorrhea—Discharge from the ear.
Oviparous—Birds, or any animals that produce their young from eggs or by eggs.
Ovum—An egg.
Oxalic Acid—An acid found in sorrel, very poisonous.
Oxide—A combination of oxygen with a metal or other substance.
Oxygen—One of the elements contained in the air and water.
Ozena—Fetid ulcer in the nose, with very fetid discharge.
- Ozone**—Oxygen in the nascent state, or with its chemical activity otherwise intensified (dynamized).
- Pabulum**—Food; aliment.
Palliative—Affording relief only.
Palpitation—Unhealthy, or unnatural beating of the heart.
Panacea—Remedy for all diseases.
Paralysis—Loss of motion; numb palsy.
Paroxysm—An increased fit of disease, occurring at certain periods.
Parturients—(Ecbolics).
Parturition—Childbirth.
Partus—Labor; the young when brought forth.
Pathological—Morbid, diseased.
Pectoral—Pertaining to the breast.
Pediluvium—A foot-bath.
Pendulous—Hanging down.
Pepsine—A peculiar substance in the stomach, which aids digestion.
Peptic—Digestive; promoting digestion.
Percolation—The process of running, or drawing a liquid through some substance.
Pericardium—Sac containing the heart.
Pericarditis—Inflammation of the pericardium.
Perineal—Relating to the region of the perineum.
Periodicity—Returning at a certain time.
Periosteum—The membrane which covers all bones.
Peristaltic—The peculiar worm-like movement of the intestines.
Peritonitis—Inflammation of lining membrane of bowels.
Perturbation—Disturbance.
Perversion—An unhealthy change; a change from its proper or natural course.
Pessary—That which will support or hold up the womb in prolapsus.
Phagedenic—Eating and fast spreading, as an ulcer.
Pharmacy—The art of combining and preparing medicines.
Phlegm—Mucus from the bronchial tubes and throat.
Phlogistic—Tending to inflammation.
Phosphate—Phosphoric acid in combination with bases, as phosphate of iron, phosphate of lime, etc.
Phosphorus—An inflammable and

- luminous substance, prepared from bones.
- Phthisis**—A wasting; consumption.
- Piles**—Tumors at or in the anus; sometimes protruding.
- Piperine**—The active principle prepared from black pepper, considered valuable in ague.
- Placebo**—A remedy to gratify the patient.
- Placenta**—After-birth.
- Plethora**—Over fullness; if healthy, causing obesity, corpulence.
- Plethoric**—Full of blood. Fleishy.
- Pleura**—The serous membrane covering the lungs, and folded upon the sides.
- Pleuritis**—Inflammation of the pleura; pleurisy.
- Pneumonia**—Inflammation of the lungs.
- Podophyllin**—The active principle made from the podophyllum peltatum, mandrake root.
- Potassium**—The basis of potash. It is a metal.
- Potus**—A drink; hence, potion, a medicated drink.
- Predisposition**—A tendency to a certain disease.
- Pregnancy**—The condition of being with child.
- Prognosis**—The art of knowing how a disease will terminate.
- Prolapsus**—A falling.
- Prolapsus Uteri**—Falling of the uterus.
- Prussiate**—A salt formed by a base with prussic acid.
- Prussic Acid**—Hydrocyanic acid; one of, or the most virulent poison in existence.
- Psora**—The itch.
- Puberty**—Full growth; mature age.
- Pubes**—The prominence at the lower front part of the body in females.
- Pudendum**—The organs of generation.
- Puerperal**—Belonging to or consequent on childbirth.
- Pulmonitis**—Inflammation of the lung or lungs.
- Pulmonary**—Relating to the lungs, as pulmonary balsam, pulmonic wafers, etc.
- Pupil**—The dark circle in the eye.
- Purgative**—A cathartic.
- Pus**—Matter discharged by sores, abscesses, etc.
- Pustule**—A slight elevation, having pus.
- Putrefaction**—Decomposition by rotting.
- Putrid**—Rotten; decomposed.
- Puerperal**—Belonging to or consequent upon childbirth.
- Pyemia**—Poisoning by absorption of pus.
- Quassia**—A bitter tonic; the chips of the wood are used.
- Rachitis**—Rickets, bending of the spine, and sometimes the long bones of the limbs; may be also connected with enlargement of the head, etc.
- Radius**—One of the bones of the forearm.
- Radix**—A root.
- Ramus**—A branch.
- Ramification**—The act of branching.
- Rancidity**—State of being rancid, stale; applied to oil, fat, butter, etc.
- Rash**—A redness of the skin in patches.
- Ratsbane**—Arsenious acid; arsenic.
- Recession**—Striking in of the blood, or disease going to the internal organs.
- Rectum**—The lower portion of the intestines.
- Refrigerant**—Cooling as of medicine or drink.
- Regimen**—Regulation of diet and habits.
- Relapse**—Recurrence of disease after an improved appearance.
- Relaxation**—Losing the healthy tone of any part, or the whole system.
- Reproduction**—Generation; procreation.
- Respiration**—The act of breathing, including both inspiration and expiration.
- Retching**—An effort to vomit.
- Retention**—Delay of the natural passage of the urine or feces.
- Revulsion**—The drawing away of disease, as by blisters, irritating plasters, etc.
- Rheumatism**—Inflammation of the fibrous tissues, mostly confined to the large joints.
- Rochelle Salts**—A chemical mixture of tartrate of potash and soda.
- Rubefacients**—Medicines which cause redness of the skin, as mustard, radish leaves, etc.
- Rupture**—Hernia; by some called a breach.

- Saccharine**—Having the properties of sugar.
- Saliva**—The secretion of the mouth, spittle.
- Salt**—A compound of an acid with a base.
- Saltpetre**—Nitrate of potash.
- Salubrious**—Favorable to health.
- Sanative**—Curative, healing.
- Sanguineous**—Bloody; sanguineous discharge, as bloody-flux.
- Santonin**—A powder obtained from worm-seed.
- Sarcoma**—A fleshy tumor, generally of a cancerous nature.
- Scabies**—The itch.
- Scirrhus**—A hard tumor, generally of a cancerous nature.
- Scrofula**—A constitutional tendency to disease of the glands, particularly of the neck.
- Scrotum**—The sac which encloses the testicles.
- Sedative**—Depressing, the opposite of stimulating.
- Sedatives** depress nervous power or lower circulation.
- Sialogogues** increase the flow of saliva.
- Slough**—Death of a part, allowing it to come out from the healthy part.
- Snake Root**—Common or Virginia snake-root; but black snake-root is the black cohosh.
- Soporifics** induce sleep.
- Stimulants** temporarily excite the nervous or circulatory system.
- Sudorifics** (Diaphoretics.)
- Stimulant**—A medicine calculated to excite an increased and healthy action.
- Styptic**—Having the power to stop bleeding.
- Spasm**—Cramp or convulsion.
- Specific**—A remedy having a uniform special action.
- Sperm**—Seminal fluid, now more often called the semen, seed.
- Spina**—The backbone; hence spine.
- Stitch**—A spasmodic pain.
- Stomatitis**—Inflammation of the mouth.
- Strangulation**—The state of choking, also applied to hernia, which cannot be reduced.
- Sudor**—Sweat; hence, sudorific, inducing sweat.
- Sulphate**—A chemical combination of a base with sulphuric acid.
- Sulphuric Acid**—Oil of vitriol.
- Suppuration**—The process of inflammation, by which pus is formed.
- Symptom**—A sign of a disease.
- Syncope**—Swooning; fainting.
- Tonics** gradually and permanently improve digestion and nutrition.
- Tannic Acid**—An acid obtained from oak bark; an astringent.
- Tartaric Acid**—An acid from cream-of-tartar, found in grapes.
- Tenesmus**—Difficulty and pain at stool, with a desire to go to stool often.
- Therapeutics**—Branch of medicine. Relating to a knowledge of treating disease.
- Thorax**—The chest.
- Tibia**—The large bone of the lower leg, shinbone.
- Tonsils**—Glands on each side of the throat.
- Trachea**—The windpipe.
- Translation**—The act of transferring disease to some other part.
- Triturate**—To rub into a powder.
- Tumor**—A morbid enlargement of a part.
- Ureter**—Duct leading from the kidney to the bladder.
- Urethra**—Duct leading out from the bladder.
- Uterus**—The womb.
- Vagina**—The passage from the womb to the vulva.
- Vermifuges** kill and expel worms.
- Virus**—Contagious poison.
- Vulva**—External opening of the female genitals.



HOME.

1. The Sublimest Moment in a Young Man's Life.—The sublimest moment in a young man's life is when he can take his newly-wed wife by the hand and lead her under his own roof and say to her, "This is our home." Married life, with the comfort of children, weaves threads of golden joy into the cares and toils of life. No pleasures, no enjoyment can excel the comforts and contentment of a happy home.

2. Home! What a Hallowed Name.—How full of enchantment and how dear to the heart! Home is the magic

circle within which the weary spirit finds refuge ; it is the sacred asylum to which the care-worn heart retreats to find rest from the toils and inquietudes of life.

3. **What is Home?**—Ask the lone wanderer as he plods his tedious way, bent with the weight of age, and white with the frost of years, ask him, what is home ? He will tell you, "it is a green spot in memory ; an oasis in the desert ; a center about which the fondest recollections of his grief-oppressed heart cling with all the tenacity of youth's first love. It was once a glorious, a happy reality, but now it rests only as an image of the mind."

4. **Tender Associations.**—Home ! that name touches every fiber of the soul, and strikes every chord of the human heart with its angelic fingers. Nothing but death can break the spell. What tender associations are linked with home ! What pleasing images and deep emotions it awakens ! It calls up the fondest memories of life and opens in our nature the purest, deepest, richest gush of consecrated thought and feeling. Next to religion, the deepest and most ineradicable sentiment in the human soul is that of home affections. Every heart vibrates to this theme.

5. **Stronger than Death.**—Home has an influence which is stronger than death. It is a law to our hearts, and binds us with a spell which neither time nor change can break ; the darkest villainies which have disgraced humanity cannot neutralize it. Gray-haired and demon guilt will make his dismal cell the sacred urn of tears wept over the memories of home, and these will soften and melt into tears of penitence even the heart of adamant.

6. **Home of My Childhood !**—What words fall upon the ear with so much music in their cadence as those which recall the scenes of innocent and happy childhood, now numbered with the memories of the past ! How fond recollection delights to dwell upon the events which marked our early pathway, when the unbroken home circle presented a scene of loveliness vainly sought but in the bosom of a happy family ! Intervening years have not dimmed the vivid coloring with which memory has adorned those joyous hours of youthful innocence.

7. **Peace at Home.**—Peace at home, that is the boon. "He is happiest, be he king or peasant, who finds peace in his home." Home should be made so truly home that the weary tempted heart could turn toward it anywhere on the dusty highway of life and receive light and strength ; should be the sacred refuge of our lives, whether rich or poor. The ties that bind the wealthy and the proud to home may

be forged on earth, but those which link the poor man to his humble hearth, are of true metal and bear the stamp of heaven.

8. Husband and Wife.—There is nothing in the world which is so venerable as the character of parents ; nothing so intimate and endearing as the relation of husband and wife ; nothing so tender as that of children ; nothing so lovely as those brothers and sisters. The little circle is made one by a singular union of the affections. The only fountain in the wilderness of life, where man drinks of water totally unmixed with bitter ingredients, is that which gushes for him in the calm and shady recess of domestic life.



CLIFF DWELLERS.
The First Inhabitants of the Earth.

9. Pleasure.—Pleasure may heat the heart with artificial excitement, ambition may delude it with golden dreams, war may eradicate its fine fibres and diminish its sensitiveness, but it is only domestic love that can render it truly happy !

10. Home.—Let thrones rot and empires wither. Home ! Let the world die in earthquake struggles, and be buried amid procession of planets and dirge of spheres. Home ! Let everlasting ages roll in irresistible sweep. Home ! No sorrow, no crying, no tears, no death ; but home ! Sweet home ! Beautiful home ! Glorious home ! Everlasting home ! Home with each other ! Home with angels ! Home with God ! Home, Home ! Through the rich grace of our Redeemer, may we all reach it.



A MORNING WALK.

Sunlight and Health.

1. **Power of Sunlight.**—Sunlight is one of the most powerful forces in nature, kindling the whole vegetable world into being, and making animal life possible by its extraordinary chemical agency,

2. **Seclusion from Sunshine.**—Seclusion from sunshine is one of the great misfortunes of our civilized life. The same cause which makes the potato vines white and sickly when grown in dark cellars, operates to produce the pale, sickly girls that are reared in our parlors. Expose either to the rays of the sun, and they begin to show color, health and strength.

3. **Philosophy of the Influence of Sunlight.**—Recent discoveries seem to prove that there is conveyed to animals, by the direct action of the sun's rays, a subtle current of iron. It does not exist in light, or but very slightly, if at all, but it is a part of the sun's rays. Therefore, we must enjoy these rays if we would feel their full effect. This iron it is which is supposed to give color to plants and animals, and to impart strength and beauty. With strength and beauty come health and good spirits, and despondency and fear are banished.

4. **Sunlight and Plants.**—It is well known that no valuable plant can grow well without being visited by the direct rays of the sun; no plant can bear seed, no fruit can ripen without it. Any vine grown in the dark is white and strengthless. Grass, grain and flowers do not thrive under the shadow of a tree.

5. **Sunlight and Domestic Animals.**—It is well known that no valuable domestic animals can thrive without being visited often by the sunshine. The fish of the Mammoth Cave are white; their eyes are not opened, because they have never felt the glorious light; they are weak and imperfect, a kind of idiots, if fish are liable to that wretchedness. Swine which are shut under the farmer's barns, and where everything is favorable except the lack of sunshine, do not thrive as well as those which have the ordinary run in the open air. Cows and horses stalled continuously in dark stables become feeble and unhealthy, and become useless in less than half the time of those which run in the open air, or whose stalls permit them to enjoy the influence of the sunlight. The same is true of all other domestic animals.

6. **Sunlight and Human Life.**—Sir James Wyllie says that "The cases of disease on the dark side of an extensive barrack at St. Petersburg, have been uniformly, for many years, in the proportion of three to one to those on the side exposed to strong light."

7. **Sunlight and Miners.**—The lack of pure light and pure air in mines tells seriously upon the health of miners. "Fourcault affirms that where life is prolonged to the average term, the evil effects of the want of light are seen in the

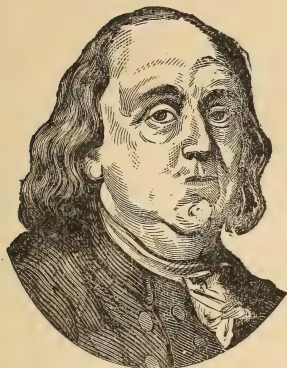
stunted forms and general deterioration of the human race. It appears that the inhabitants of the arrondissement of Chimay, in Belgium, three thousand in number, are engaged partly as coal miners, and partly as field laborers. The latter are robust, and readily supply their proper number of recruits to the army; while among the miners it is in most years impossible to find a man who is not ineligible from bodily deformity or arrest of physical development.

8. The Sunlight and Blinds.—"I wish God had never permitted man to invent green blinds," said a thoughtful and brilliant woman. Why did she say it? Because she saw, wherever she went over our fair and sunshiny land, that green blinds were closely shut upon our comfortable houses, excluding the sun's light, which we may be sure God sends down for some blessed purpose. That blessed purpose is to promote growth, to give strength, to impart color, to gild with beauty, to inspire good thoughts, and to insure light hearts and cheerful faces.

9. Sunlight and Sleep.—Sleepless people—and they are many in America—should court the sun. The very worst soporific is laudanum, and the very best sunshine. Therefore, it is very plain that poor sleepers should pass many hours in the day in sunshine, and as few as possible in the shade.

10. Give the Children Sunshine.—Children need sunshine quite as much as flowers do. Half an hour is not enough. Several hours are required. The most beautiful flowers that ever studded a meadow could not be made half so beautiful without days and days of the glad light that streams through space. Light for children. Sunshine for the little elves that gladden this otherwise gloomy earth. Deal it out in generous fullness to them. Let the nursery be in the sunshine. Better plant roses on the dark side of an iceberg than rear babies and children in rooms and alleys stunted of the light that makes life.





... BENJAMIN FRANKLIN ...

"A man whose life was earnest and always cheerful."

J. Q. Adams.

HOW TO LIVE.

"Discover what is true, and practice what is good, are the two most important objects in life."—*Anonymous.*

"Life appears to be too short to be spent in nursing animosities or rehearsing wrongs."—*Anonymous.*

"Remember that the industrious, progressive man is not only happy, but healthy and cheerful. Industry is not only one of the best safeguards against disease, but an excellent remedy."

Take life cheerfully. Take it just as though it was—as it is—an earnest, vital, essential affair. Take it just as though you personally were born to the task of performing a merry part in it—as though the world had waited for your coming. Take it as though it was a grand opportunity to do and to achieve, to carry forward great and good schemes; to help and cheer a suffering, weary, it may be a heart-brcken brother. The fact is, life is undervalued by a great majority of mankind. It is not made half as much of as should be the case. Where is the man, or woman, who accomplishes one

tithe of what might be done? Who cannot look back upon opportunities lost, plans unachieved, thoughts crushed, aspirations unfulfilled, and all caused from the lack of necessary and possible effort. If we knew better how to take and make the most of life, it would be far greater than it is. Now and then a man stands aside from the crowd, labors earnestly, steadfastly, confidently, and straightway becomes famous for wisdom, intellect, skill, or greatness of some sort. The world wonders, admires, idolizes; and yet it only illustrates what each may do if he takes hold of life with a purpose. If a man but say he will, and follows it up, there is nothing in reason he may not expect to accomplish. There is no magic, no miracle, no secret to him who is brave in heart and determined in spirit.

CHEERFULNESS.

"The most manifest sign of wisdom is continued cheerfulness."

—*Montaigne.*

Cheerfulness, a nymph of healthiest hue."—*Collins.*

"Cheerful looks make every dish a feast."—*Massinger.*

Those who cultivate cheerfulness do much to make easier the battle of life. It gives elasticity to the spirit, hope to the heart. More than this, it gives a sun-like warmth and beauty to every scene in which the individual takes a part. Some there are so constituted that they look upon the bright side of everything and find a silver lining in every cloud. They enjoy all pleasures and blessings, and they are not overwhelmed with any sorrow or disaster. On the other hand some are always gloomy, and under affliction and misfortune utterly depressed. Life to them is an everlasting sorrow, and cheerfulness has no place in their ever forboding minds and saddened hearts. It is well, therefore, for all, especially the young, to encourage cheerfulness as a habit, for it will give to daily life a charm which cannot be known without it. Try it for a single day, and you will feel so different that you will be encouraged to continue the practice.



HEALTHY HOMES.

"Cleanliness is the elegance of the poor." **ENGLISH PROVERB.**

"Virtue never dwelt long with filth and nastiness." **COUNT RUMFORD.**

Health is wealth. Almost all the fevers, cholera, and other plagues result from poisoned air, coming from bad drains, uncleaned streets, and badly kept back yards. House slops and remnants of the table, or decaying vegetables, should never be allowed to be thrown in the back yard. Good drains, clean cellars, and general cleanliness about the house, are the only safeguards of health.

Pure air and good ventilation are just as necessary in the house as about the house. Whenever a number of persons live together, the atmosphere becomes poisoned, unless means are provided for its constant change and renovation. The death rate is much greater in crowded tenement houses than in the well ventilated and regulated homes of the wealthier classes. Diphtheria, scarlet fever, and other dreaded contagious diseases are more prevalent and fatal in our large cities than in the country or smaller towns.

Every person above fourteen years of age requires about six hundred cubic feet of shut up space to breathe in during the twenty-four hours. If he sleeps in a room of smaller dimensions, he will suffer more or less the serious results of poisoned air. Shut up a mouse in a glass bottle and it will gradually die, by re-breathing its own breath. About half the children born in some manufacturing towns die before they are five years old, principally because they want pure air. Every sleeping room, winter and summer, should have an open window during the night, and the room and the bedding should be thoroughly aired every morning. Remember that *pure air* in and about the home will do more to preserve health than **all the medicines** which have ever been compounded.



THE CELEBRATED DR. KOCH.

The Great Revolutions in the Practice of Medicine.

The wisdom of to-day is the ignorance of to-morrow is an old but true maxim. Enlightened chemistry, with the aid of the microscope, has made startling discoveries within the last few years. Old medicines and old remedies in the field of medicine and surgery, have been so changed and supplanted by new ideas, that scarcely a vestige of the principles and practice of the old-time methods remain. Prof. Tyndall, of England, Louis Pasteur, of France, Dr. Koch, of Germany,

and many other eminent scientists, have made wonderful discoveries with the microscope, and placed new fields of study before the medical profession.

The Wonderful Revelations of the Microscope. The Discovery of the Invisible Assailants of Health.

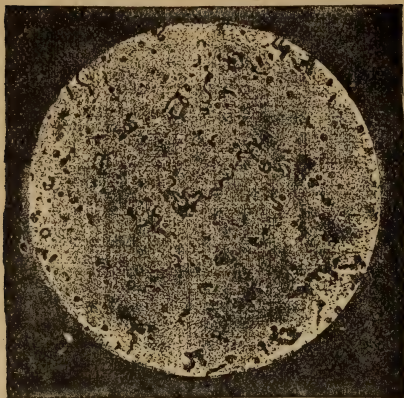


The microscope has revealed a new kingdom of invisible life. The air we breathe, the water we drink, the air above us and the earth beneath us, are filled with countless myriads of little bodies, known as "microbes," "bacteria," "bacilli," etc. They are the most insidious, relentless and powerful enemies to human life, and destroy more lives than war, famine, fire, murder, shipwreck, and all other casualties combined. There is scarcely a disease known to mankind which is not due to the entrance of these "microbes" into the body. Disease is simply the manifestation of their presence. They feed upon the blood and tissue until destroyed, or death destroys their victim.

All acute contagious diseases, such as small-pox, chicken pox, scarlet fever, typhus fever, measles, influenza, whooping cough, hydrophobia etc., are the results of living microbes which have gained access to the blood or tissue.

Another class of microbes, says Dr. Samuel Hart, are called *miasmatic contagions*. The germs are propagated in diseased persons, but, as a law of their further development, they must undergo one change outside of the body, in some decomposing organic body, before they can again produce their peculiar disease in healthy persons except by inoculation. Typhoid fever, yellow fever, cholera, diphtheria, acute consumption, erysipelas, etc., belong to this class of disease.

When the microbes originate entirely in decomposing matter, continues Dr. Hart, the diseases caused are intermittent fever, remittent fever, continued malarial fever, etc.



Cholera Bacteria found in the intestines in great numbers.

HOW MICROBES OR BACTERIA WORK.

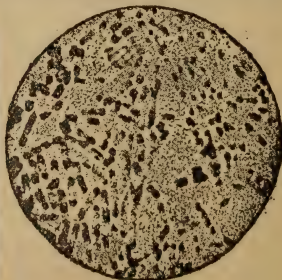
In many diseases the microbes produce a poison which destroys themselves. But this fortunate tendency of self-destruction seems to belong only to the contagious diseases.

Some produce harmful or fatal changes in the blood. Some obstruct the minute blood vessels by gathering in infinite numbers. Some attack blood cells, penetrate their walls, and destroy the tissue, and some produce a poison that proves fatal to the infected person.

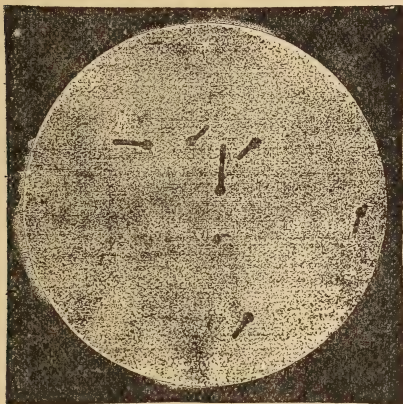
Aggressive and defensive remedies are being rapidly formulated, and before many years, no doubt, we shall have many excellent remedies for the extermination of microbes.



Diphtheria Bacillus.



Typhoid Fever Bacillus.



Lock-Jaw Bacteria.

HOW MICROBES OR BACTERIA ATTACK THE BODY.

Microbes gain access to the human body principally through the mouth, but they may also effect an entrance through a wound, or even an invisible breach of the skin's surface. They set up a disease, each after its kind, by lighting up a fire of inflammation in the place where they take up their quarters, and by manufacturing poisonous products which intensify the mischief.

Pursuing their advantage, they scatter themselves throughout the body, using the blood-vessels as convenient channels for the purpose.

Taking the lungs as an illustration, when a microbe which engenders consumption gains a footing in those organs, it first "squats" so to speak, in one spot, and proceeds to cultivate the ground it has found, in its own way. The deadly seed is sown and a crop of "tubercles" is the result; these slowly ripen to pursue the metaphor, and then rot, the consequence being the complete destruction of the structure of the lung at that point.

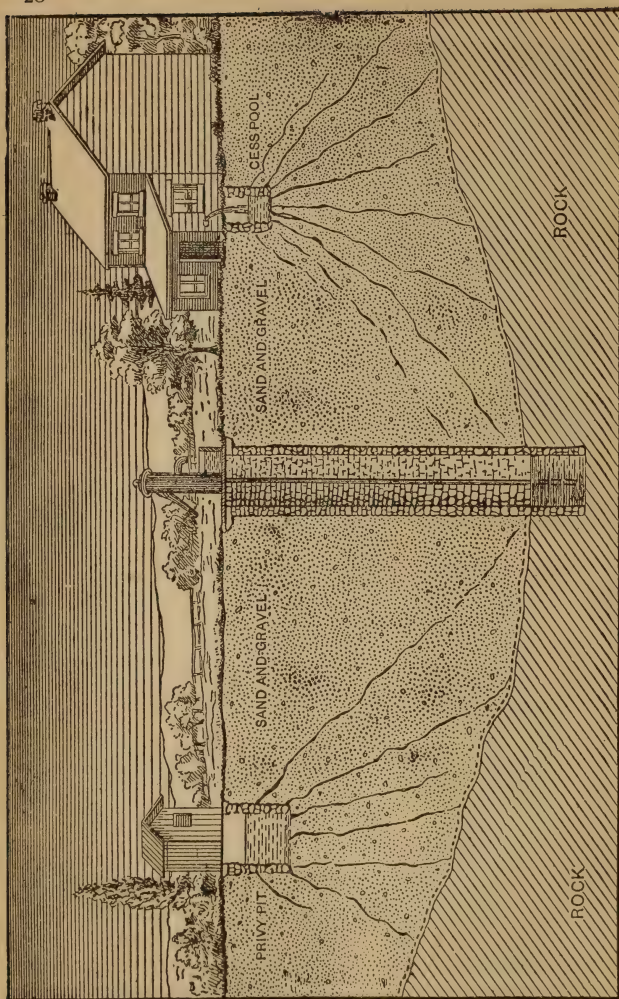
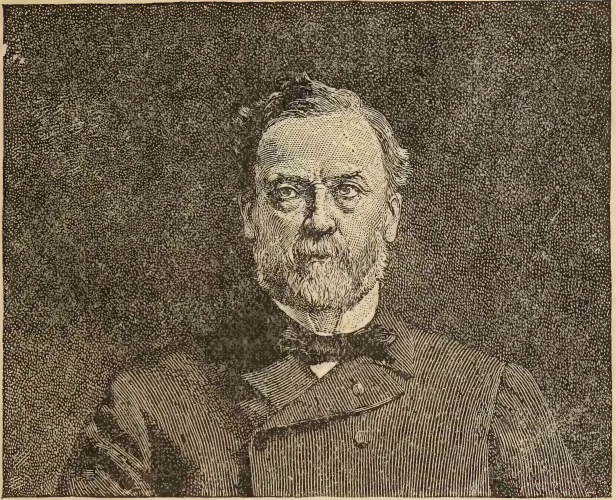


Fig. 60.—Pollution of water by sewage percolating through the soil.

The Condition of Many Wells.



The Celebrated French Scientist, Pasteur.

HOW TO TEST THE IMPURITIES OF WATER.

Into a ground glass stoppered, perfectly clean bottle put five ounces of the water to be tested. To the water add ten grains of pure, granulated, white sugar. Cork tight, and set in a window exposed freely to light, but not to direct rays of the sun. Do not disturb the bottle, and keep the temperature as near 70 degrees Fahrenheit as possible. If the water contains organic matter, within forty-eight hours an abundance of whitish specks will be seen floating about, and the more organic matter the more specks. In a week or ten days, if the water is very bad, the odor of rancid butter will be noticed on removing the stopper. The little specks will settle to the bottom, where they appear as white flocculent masses. Such water should not be used for potable purposes.

DISEASE GERMS IN DRINKING WATER, AND HOW TO COMBAT THEM.

1. Taking a little filtered beef bouillon, clear as crystal to the eye, and showing under the microscope not a trace of life, let us place it in a glass flask and, boiling it repeatedly to destroy any germs it may contain, set it aside in a warm place with the mouth of the flask open. In a few days the liquid previously so limpid becomes very turbid. If we take a drop and magnify it 1,000 diameters we shall see that the liquid is crowded with life, and the few ounces of bouillon contain a vaster population than our greatest cities can boast of.

2. Cohn has seen bacillus in infusions at blood heat divide every twenty minutes. We have calculated this rate for twenty-four hours, and have found that at the end of the first day there would be as the descendants of a single bacillus 4,722,366,482,869,645,213,696 individuals; and though we can pack a trillion (1,000,000,000,000) in a cubic inch, this number would fill about 2,500,000 cubic feet. This is clearly not what they do, but simply what they are capable of doing for a short time when temperature and food supply are favorable.

3. Since the multiplication of bacteria is so favored by the warmth of Summer, it requires special sanitary precaution, in order to keep free from disease.

4. **Vegetable Refuse or Slop.**—If garbage and slops are thrown about the house, you can readily see what millions and myriads of bacteria will form, and how the whole ground will soon swarm with them. They will more or less work their way among the things that must be eaten, or if a heavy rain should come, will easily find their way into the well and contaminate the water. Malaria, typhoid fever, etc., will soon be the result.

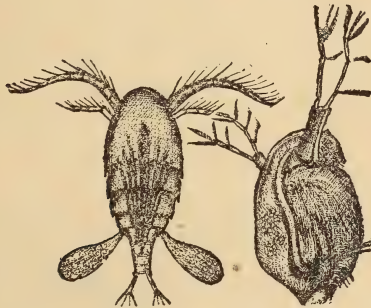
5. **Sink Holes.**—There should be a sink hole for garbage, slops and other refuse matter of the house, and this sink hole should be sufficiently far from the well, so as not to contaminate the water.

6. That sunshine is a germicide as well as a tonic has but recently been proved: if we take two flasks containing the bacillus with spores, and keep one in the direct sunshine for a long time, while the other, exposed to the same heat, is kept from the sun, we find the sun-exposed spores have lost their virulence, while the others remain. Is there need to further press so patent a lesson? As bacteria grow best in the presence of considerable moisture, we may ex-

pect to encounter them in greater abundance in water than in air. Rain water contains 60,000 to a quart, the Vanni four times as many, while the polluted Seine from 5,000,000 to 12,000,000.

7. **Remedy for Impure Water.**—The minute size of bacteria renders it very difficult to use any system of filtration and have pure water. If the water is impure there is but one absolutely safe method, and that is boiling.

8. **Boiling Water.**—No disease germs producing bacteria can stand boiling for an hour or so. It destroys all vegetable and animal impurities. All doubtful water should be thoroughly boiled.



Animals that dwell in our drinking water.

THE ANIMALS WE DRINK IN OUR WATER.

The above illustration shows some of the animals we drink in impure water, which is a very prolific source of many diseases.

Thousands of wells are so situated that they receive a drainage from filthy and decomposing matter, or are polluted by slop holes' imperfect drains, that are too closely adjacent to the well.

Water from many of the wells is unfit for the human stomach, and some of them are as poisonous as Paris green. Impure water may be used for a time without any percepti-

ble injury, but it is only a matter of time when it will develop into typhoid fever, diphtheria and many other diseases.

In either case, when well water is used, people should look the location over carefully, to see if the lay of the land is such as to allow decomposing matter from the surface of the ground or any other place to soak into the well. If this is the case, it should be abandoned at once if you value life, for it is positively known that thousands have lost their lives by using such water.

Every well should be laid up with brick or lime-stone and cemented about four feet from the surface. That will make a safe protection.

Heavy rains will often cause water to flow into wells, which has a very bad effect, and often develops disease germs.





RIPE OLD AGE.

WHY SO MANY PEOPLE DIE BEFORE THEIR TIME.

1. According to the sacred writings of King Solomon, human life has been limited to three score and ten.

2. It is a fact easily ascertained by observation that those people who live to be seventy, eighty, ninety or one hundred years of age have not been of the wealthier classes. People who live what is called high life, eat late and highly stimulating suppers, with irregular hours of rest and sleep, seldom reach that era of life known as old age. Highly seasoned food, champagne, and midnight banquets are not the invigorating influences that preserve the health.

3. The persons who live to old age have never sown many wild oats in youth, they have lived a steady and regular

life, eating plain food and retired without allowing the cares of the day to interrupt their rest or sleep.

4. Highly seasoned food, and luxuries of any kind always tend to excesses which produce premature decay. For some years past, reported deaths from "Heart Failure" have become frequent and fashionable among practicing physicians, and perhaps the report may have been true, but not the whole truth, for it is probable that in nine cases out of ten the heart failure was secondary and brought on by an ineffectual effort of the stomach or alimentary tract to cast off indigestible matter clogging the way, caused by excesses of over-eating or over-nervous strains.

5. Bright's disease, that most miserable misnamed disease. If statistics could be kept showing the real cause of all deaths occurring between the ages of forty-five and seventy-five, the result in all probability would prove that more than half fall victims to disease engendered by stomach difficulties, brought on by too high living, excesses in both eating and drinking.

6. The habit of constipation is another serious obstacle in the way of long life. Its progress is slow and so insidious as to beguile the sufferer into the belief that it is not pernicious or worthy of attention; and so apprehension is lulled, while the foundation of some fatal chronic disease involving important organs is being laid.

7. When troubled with constipation it is usual to resort to purgatives, which afford temporary relief, but usually have a tendency to confirm the disease. Injections are sometimes used with no better results, for besides being a bungling remedy they have no permanent influence in overcoming the habit. Bread made of unbolted rye or wheat meal is an excellent remedy, but not being in common use few patients can be sure of getting it regularly, especially if engaged in active pursuit, as many are. Before the habit is firmly established, eating fruit deserts at dinner every day is apt to afford some relief, and if there is no habit of constipation it may act as a preventive. Baked apples are excellent for constipation. Eating a fair-sized baked apple (warm or cold) at the beginning of each meal three times a day, has cured many very obstinate cases of constipation. It is a very palatable and cheap remedy, and much more certain and effective than strong drugs.

8. To suggest the methodical use of cold water as a beverage in the absence of thirst, as a means of augmenting the chances of longevity, might seem to render one liable to be called a crank, if not a lunatic, but nevertheless the idea

claims a physiological origin, and is well supported by experience. Solid and dry as the human body appears, water constitutes more than three-fourths of its bulk, and all the functions of life are carried on in a water-bath. And although the sense of thirst may be trusted to call for a draught of cold water when required, that offers no reason why we may not be benefited by it in the absence of thirst.

9. Drinking cold water as a beverage between meals is surely very conducive to health and increases the chances of long life. People rarely drink anything between meals, and all the liquid is taken with the meals, this surely without question is very injurious to the digestive organs. It is not natural for animals to drink while eating. Man is the only exception. Food should be thoroughly masticated and not washed down with tea and coffee or water.

10. If people would take a good drink of water just before retiring and a good cool glass the first thing in the morning on rising, drink once or twice between meals during the day, the present rate of mortality would be greatly reduced, and there would be much less sickness. The habit of self-indulgence and exposure, the result of swilling beer and other alcoholic stimulants at irregular hours, are productive of more disease than any other agency.



Gladstone, a man hale and vigorous
at the age of 86 years.

11. Don't be afraid to work; few people are injured by hard work if they take but proper care of their body. More people die from want of exercise than from over-exercise.

"Pure water, temperate habits and hard work are the best friends of man."

"Better hunt in fields for health unbought,
Than fee the doctor for a nauseous draught."

—Dryden.



WILLING TO WORK.



FEEDING THE UNFORTUNATE POOR.

Charity, Happiness, and Length of Days.

Gently to hear, kindly to judge.—*Shakespeare.*

He hath a tear for pity, and a hand
Open as day for melting Charity. —*Shakespeare.*

Then gently scan your brother man,
Still gentler, sister woman;
Though they may gang a kennin' wrang,
To step aside is human. —*Burns.*

1. Charity is a golden chain that reaches from heaven to earth. It is the brightest star in the Christian's character. Without it our religion is like a body without a soul; our friendship a shadow of a shadow.

2. The rich should have charity for the poor and the poor should have charity for the rich, for to-morrow the poor may be rich and the rich poor. It has been so in all ages and will continue to be so as long as man lives.

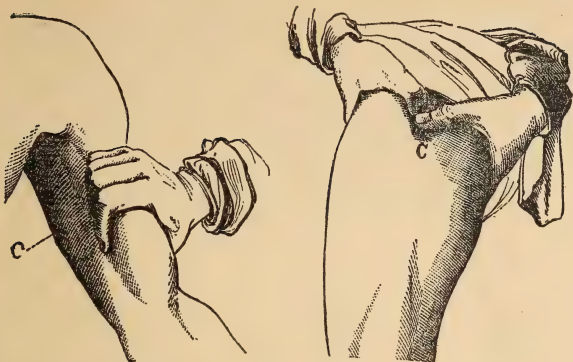
3. Those who cultivate benevolence and charity in their heart will always find enjoyment in the prosperity of others.

They will find more to cheer and more to enjoy, for a miserly soul is the most miserable of all of God's created beings. In the home of charity there is happiness, and happiness is conducive of health.

4. How sweet are the hands that are reached out to relieve distress; how balmy the influence and virtue of those who try to alleviate the suffering of the poor. Cultivate benevolence, for it is a home virtue and a household beauty. Beware of those people who never remember the needy or have nothing to offer for charity. And let all remember who have been blessed with abundance, that it is not at all uncertain but their children or their children's children will beg for bread. Therefore deal generously with the poor, and you will be happier and healthier and live longer for it.

5. Every good hearty laugh in which a man indulges tends to prolong his life, as it makes the blood move more rapidly and gives a new and different stimulus to all the organs of the body from what it does at other times. So let us have all the joy we can.





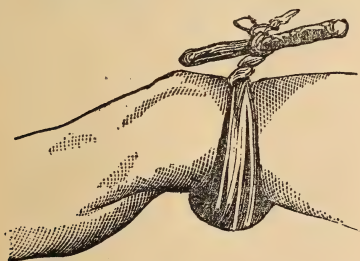
Accidents and Emergencies.

HOW TO STOP BLEEDING.

1. **Cause.**—Bleeding is the result of the rupture of an artery, vein, or other small blood vessel, and may be caused by a cut, bruise, or may take place spontaneously.

2. **Fainting.**—If a person is fainting on account of loss of blood, do but little to rally him, as fainting tends to stop the bleeding.

3. **Arterial Bleeding.**—If the blood is a bright scarlet color and comes out in throbbing jerks, it comes from an artery, and the fingers must be placed on the wound with considerable pressure till bandages can be applied, or tie a handkerchief tightly around the limb or member above the injury and place a stick in it and turn it until the pressure is sufficient to stop the flow of blood.



Arterial bleeding is the most dangerous and a physician should at once be sent for.

4. **Venous Bleeding.**—Venous blood is dark colored and flows continually. It can usually be stopped by pressure

with the fingers or a piece of linen. The injured parts may be drawn together, and sticking plaster used as soon as the flow of blood ceases.

5. Tight Bandages.—If the limb should become purple, loosen the bandages a little, and if the flow of blood begins again it can be tightened up so as to control it until the physician arrives.

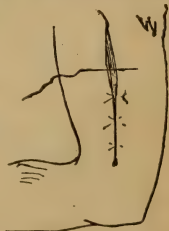
6. Precaution.—If an artery is cut, compress above the wound, and if a vein is cut, compress below.



CUTS AND WOUNDS.

1. Clean the Wound.—In case of a wound first clean it and wash it thoroughly with warm water, and when the bleeding ceases, bring the edges together, either fastening them with a bandage or court plaster.

2. Sewing a Wound. — If the wound is very wide a few stitches may be necessary. Take a needle and silk thread and oil both needle and thread thoroughly with vaseline or pure lard. Each stitch should be tied into a knot, and should be left at least twenty-four hours before removing.



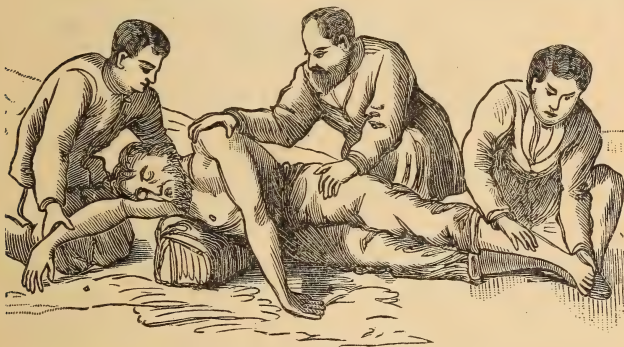
3. Pieces Cut Out.—If a patch or portion is cut completely away, quickly clean the portion cut away and replace it and keep it in the exact position by court plaster or

bandages. No time must be lost in the treatment of a case of this kind.

4. Stabs. — Stabs are more dangerous than common wounds, and the wound must be kept open and never be closed up until it heals naturally. All persons suffering from stabs should remain quietly in bed until all serious symptoms have disappeared.

5. Gun Shot Wounds. — All wounds of this character are serious and a physician should be promptly summoned.

6. Sprains. — Sprains are the straining of the tendons and ligaments, and require great care and caution in their treatment. The injured member should be kept very quiet and bandaged with warm water. Then apply freely Arnica, Pond's Extract or the like.



UNUSUAL EMERGENCIES.

1. Poisoning. — When poison is swallowed, an excellent remedy is to mix one heaped tea-spoonful of salt and one heaped tea-spoonful of mustard in a glass of water and drink immediately. Then give the whites of two eggs in a cup of coffee. Give the eggs alone if the coffee cannot be readily secured.

2. Treatment of Poisoned Wounds. — Suck poisoned wounds, unless the mouth is sore; enlarge the wound, or if very serious cut out the part without delay, or cauterize with a hot iron.

3. **Choking.**—If badly choked, get upon all fours and cough.

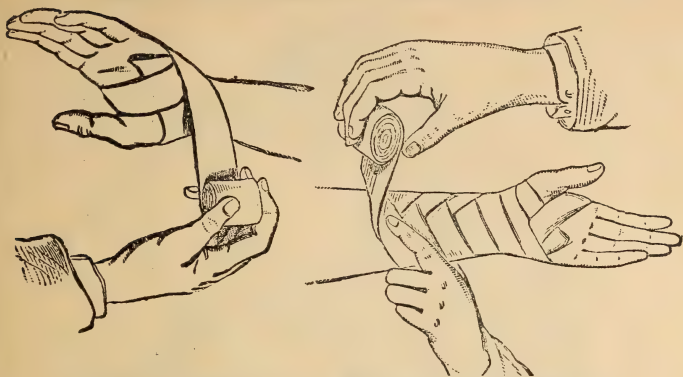
4. **Fish Bone in the Throat.**—Press the tongue down with a spoon handle so as to be able to look down the throat and with a pair of tweezers remove the bone. If this cannot be done, swallow the whites of several eggs (one at a time), or take a big bite of bread and swallow it; if this fails, send for a good surgeon at once.



5. **Sunstroke.**—Remove the patient in the shade, and apply cold water to the head and neck, and a mustard plaster to the feet. Administer strong stimulants.

6. **Coal Gas Suffocation.**—If the patient does not breathe, produce artificial respiration; place the patient on his face and turn the body gently, but completely, one side and a little beyond; then again on the face and so on alternately. Repeat these movements deliberately and perseveringly, fifteen times only in a minute.





How to Make All Kinds of Bandages FOR WOUNDS AND SORES.

1. Every wound or bruise should be well bandaged with soft, *linen* rags, and protected from the air.

2. Care should be used not to draw the bandages too tightly, as it will cause much suffering.

3. If a limb is bleeding badly, wrap a handkerchief around it above the wound. Tie a small stick into it, and twist it until the blood stops flowing. — Serious bleeding always results from the cutting of an artery, and demands immediate attention.

4. An artery can always be known by its beating, or by the blood escaping in jets, and if severed in any other parts of the body except the limbs, the flow of blood must be stopped by placing the hand upon the wound and holding the parts together until a physician can be summoned.

5. Sores and ulcers should be cleansed and dried every day, and new and *clean* bandages applied. No wound or sore will heal rapidly unless kept perfectly clean.





MAKING A PORK AND ONION POULTICE.

How to Make All Kinds of Poultices.

A PORK AND ONION POULTICE, GOOD FOR WOUNDS MADE BY RUSTY TOOLS OR NAILS, BRUISES, AND LACERATED WOUNDS.

Take raw salt pork and about the same bulk in boiled onions, and chop together thoroughly fine in a wooden bowl and apply warm and bind on about half an inch thick on the injured or wounded parts.

BREAD AND MILK POULTICE.

Break up wheat bread into small pieces and pour on boiling milk and stir well until the mass is brought to the thickness of mush. Spread upon a cloth and apply to the surface intended to be poulticed.



FLAXSEED-MEAL POULTICE.

Place the ground flaxseed in a basin and pour on boiling water, mixing it thoroughly, so there will be no lumps. Spread it a quarter of an inch thick upon folded cloth and lay over it a piece of cheese-cloth. Apply as needed.

SLIPPERY-ELM POULTICE.

Moisten the powdered slippery-elm bark with hot water, spread and apply as directed for flaxseed-meal poultice.

YEAST POULTICE.

Take about one pound of oatmeal and add to it one-half pint of yeast and heat the mixture until it swells. Apply to cloth as in other poultices.

CHARCOAL POULTICE.

Powder fresh charcoal and mix it with bread. Pour on warm water and stir it thoroughly and apply in such quantities as may be deemed necessary.

ONION, TURNIP, OR CARROT POULTICES.

Boil the onions, turnips, or carrots, and stir in sufficient cornmeal to make a thick paste. Apply warm to the surface.

MUSTARD POULTICE.

Mix ground mustard with warm water and apply next to the skin, or for milder effects place a thin cheese-cloth between the skin and the poultice.

BRAN POULTICE.

Place the quantity of bran required, according to the size of the poultice, upon the top of boiling water, and when the heat has penetrated the bran, stir it gently in. Pour off the surplus water, and apply the poultice as hot as it can be borne.

BREAD POULTICE.

Boil about one-half pint of water in a small, clean, lined saucepan, into this put two ounces of stale bread, and let it soak for a few minutes, and apply.



Practical Rules for Bathing.

1. Bathe at least once a week all over, thoroughly. No one can preserve his health by neglecting personal cleanliness. Remember, "Cleanliness is akin to Godliness."
2. Only mild soap should be used in bathing the body.
3. Wipe quickly and dry the body thoroughly with a moderately coarse towel. Rub the skin vigorously.

4. Many people have contracted severe and fatal diseases by neglecting to take proper care of the body after bathing.

5. If you get up a good reaction by thorough rubbing in a mild temperature, the effect is always good.

6. Never go into a cold room, or allow cold air to enter the room until you are dressed.

7. Bathing in cold rooms and in cold water, is positively injurious, unless the person possesses a very strong and vigorous constitution, and then there is great danger of laying the foundation of some serious disease.

8. Never bathe within two hours after eating. It injures digestion.

9. Never bathe when the body or mind is much exhausted. It is liable to check the healthful circulation.

10. A good time for bathing is just before retiring. The morning hour is a good time also, if a warm room and warm water can be secured.

11. Never bathe a fresh wound or broken skin with cold water; the wound absorbs water, and causes swelling and irritation.

12. A person not robust should be very careful in bathing; great care should be exercised to avoid any chilling effects.



All the Different Kinds of Baths, and How to Prepare Them.

THE SULPHUR BATH.

For the itch, ringworm, itching, and for other slight skin irritations, bathe in water containing a little sulphur.

THE SALT BATH.

To open the pores of the skin, put a little common salt into the water. Borax, baking soda or lime used in the same way are excellent for cooling and cleansing the skin. A very small quantity in a bowl of water is sufficient.

THE VAPOR BATH.

1. For catarrh, bronchitis, pleurisy, inflammation of the lungs, rheumatism, fever, affections of the bowels and kidneys, and skin diseases, the vapor-bath is an excellent remedy.

2. APPARATUS.—Use a small alcohol lamp, and place over it a small dish containing water. Light the lamp and allow the water to boil. Place a cane-bottom chair over the lamp, and seat the patient on it. Wrap blankets or quilts around the chair and around the patient, closing it tightly about the neck. After free perspiration is produced the patient should be wrapped in warm blankets, and placed in bed, so as to continue the perspiration for some time.

3. A convenient alcohol lamp may be made by taking a tin box, placing a tube in it, and putting in a common lamp wick. Any tinner can make one in a few minutes, at a trifling cost.

THE HOT-AIR BATH.

1. Place the alcohol lamp under the chair, without the dish of water. Then place the patient on the chair, as in the vapor bath, and let him remain until a gentle and free perspiration is produced. This bath may be taken from time to time, as may be deemed necessary.

2. While remaining in the hot-air bath the patient may drink freely of cold or tepid water.

3. As soon as the bath is over the patient should be washed with hot water and soap.

4. The hot-air bath is excellent for colds, skin diseases, and the gout.

THE SPONGE BATH.

1. Have a large basin of water of the temperature of 88 or 95 degrees. As soon as the patient rises rub the body over with a soft, dry towel until it becomes warm.

2. Now sponge the body with water and a little soap, at the same time keeping the body well covered, except such portions as are necessarily exposed. Then dry the skin carefully with a soft, warm towel. Rub the skin well for two or three minutes, until every part becomes red and perfectly dry.

3. Sulphur, lime or salt, and sometimes mustard, may be used in any of the sponge-baths, according to the disease.

THE FOOT BATH.

1. The foot-bath, in coughs, colds, asthma, headaches and fevers, is excellent. One or two table-spoonfuls of ground mustard added to a gallon of hot water, is very beneficial.

2. Heat the water as hot as the patient can endure it, and gradually increase the temperature by pouring in additional quantities of hot water during the bath.

THE SITZ BATH.

A tub is arranged so that the patient can sit down in it while bathing. Fill the tub about one-half full of water. This is an excellent remedy for piles, constipation, headache, gravel, and for acute and inflammatory affections generally.

THE ACID BATH.

Place a little vinegar in water, and heat to the usual temperature. This is an excellent remedy for the disorders of the liver.

A Sure Cure for Prickly Heat.

1. Prickly heat is caused by hot weather, by excess of flesh, by rough flannels, by sudden changes of temperature, or by over-fatigue.

2. TREATMENT.—Bathe two or three times a day with warm water, in which a moderate quantity of bran and common soda has been stirred. After wiping the skin dry, dust the affected parts with common corn starch.

*HOW TO USE HOT WATER AS A MEDICINE,
AND ITS WONDERFUL CURATIVE AND
MEDICAL PROPERTIES.*

To drink water internally it should be used at about 100° Fahr. Hot water possesses more medical properties than almost any other liquid or substance. It is a domestic remedy that is available to all and can easily be applied.

1. There is nothing better for cuts, bruises, congestion of the lungs, sore throat, rheumatism, etc., than hot water.

2. Headache almost always yields to the application of hot water to the feet and to the back of the neck.

3. A towel folded several times and quickly wrung out of hot water and applied over the face will relieve, and many times cure, toothache and neuralgia.

4. A strip of flannel or a napkin folded lengthwise and dipped in hot water and wrung out and then applied around the neck of a child that has the croup, will often bring instant relief. Apply every five minutes.

5. Hot water taken freely half an hour before bedtime is one of the best remedies for constipation.

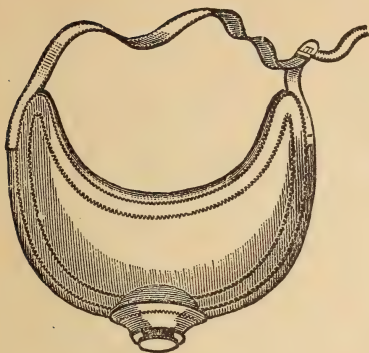
6. A cup of hot water taken just after rising before breakfast has cured thousands of indigestion.

7. There is no other domestic remedy so widely recommended by physicians for the disease of dyspepsia.

8. Persons suffering with cold hands and feet will often find a great relief by taking a cupful of hot water several times a day.

9. A hot hipbath will often relieve the distressing sensation of dysentery, the itching of piles, etc.

10. The inhaling of steam is often efficient in relieving coughs, colds, sore throat, asthma and croup.



HOT-WATER THROAT BAG.



HOT-WATER BAG

HOW TO APPLY AND USE HOT WATER IN ALL DISEASES.

1. **THE HOT WATER THROAT BAG.** The hot water throat bag is made from fine white rubber fastened to the head by a rubber band (see illustration), and is an unfailing remedy for catarrh, hay fever, cold, toothache, headache, earache, neuralgia, etc.

2. **THE HOT WATER BOTTLE.** No well regulated house should be without a hot water bottle. It is excellent in the application of hot water for inflammations, colic, headache, congestion, cold feet, rheumatism, sprains, etc., etc. It is an excellent warming pan and an excellent feet and hand warmer when riding. These hot water bags in any variety can be purchased at any drug store.

3. Boiling water may be used in the bags and the heat will be retained many hours. They are soft and appliable and pleasant to the touch, and can be adjusted to any part of the body.

4. Hot water is good for constipation, torpid liver, and relieves colic and flatulence, and is of special value.

5. *Caution.* When hot water bags or any hot fomentation

is removed, replace dry flannel and bathe parts in tepid water and rub till dry.

6. By inflammations it is best to use hot water and then cold water. It seems to give more immediate relief. Hot water is a much better remedy than drugs, paragoric, Dover's powder or morphine. Always avoid the use of strong poisonous drugs when possible.

7. Those who suffer from cold feet there is no better remedy than to bathe the feet in cold water before retiring and then place a hot water bottle in the bed at the feet. A few weeks of such treatment results in relief if not cure of the most obstinate case.

HOW TO USE COLD WATER.

Use a compress of cold water for acute or chronic inflammation, such as sore throat, bronchitis, croup, inflammation of the lungs, etc. If there is a hot and aching pain in the back apply a compress of cold water on the same, or it may simply be placed across the back or around the body. The most depends upon the condition of the patient.





Reading the Paper.



HOLD THE VIAL IN ONE HAND AND THE CORK IN THE OTHER.

How Much Medicine to Take as a Dose.

NAME OF DRUG.	DOSE.	NAME OF DRUG.	DOSE.
Aloes.....	3 to 15 grains.	Syrup of Sarsaparilla ..	1 to 4 teasp'fuls.
Anise Oil	5 to 15 drops.	" Seneka	1 to 2 teasp'fuls.
Aqua Ammonia (dilute)	10 to 30 drops.	" Rhubarb.....	1 to 2 teasp'fuls.
Balsam Copaiba.....	10 to 40 drops.	Tannic Acid.....	1 to 5 grains.
Balsam of Fir.....	3 to 10 drops.	Tinct. of Aconite Root	1 to 5 drops.
Bismuth	5 to 40 grains.	" Aloes.....	1 to 8 teasp'fuls.
Bromide of Potassium.	5 to 40 grains.	" Asafœtida.....	$\frac{1}{2}$ to 1 teasp'ful.
Buchu Leaves	20 to 40 grains.	" Belladonna.....	10 to 30 drops.
Calomel (as alterative)	1-12 to 1 grain.	" Bloodroot.....	$\frac{1}{4}$ to $\frac{1}{2}$ teasp'ful.
Castor Oil.....	1 to 8 teasp'fuls.	" Columbo.....	1 to 2 teasp'fuls.
Citrate of Iron	2 to 5 grains.	" Camphor.....	5 to 60 drops.
Citrate Iron & Quinine	3 to 8 grains.	" Cayenne.....	10 to 60 drops.
Cream of Tartar.....	$\frac{1}{2}$ to 3 teasp'fuls.	" Castor.....	$\frac{1}{2}$ to 1 teasp'ful.
Dover's Powder.....	5 to 10 grains.	" Catechu.....	$\frac{1}{2}$ to 2 teasp'fuls.
Elecampane.....	20 to 60 grains	" Cinch. Comp.....	$\frac{1}{2}$ to 4 teasp'fuls.
Epsom Salts.....	$\frac{1}{4}$ to 1 ounce.	" Colchicum.....	10 to 20 drops.
Gallic Acid.....	5 to 10 grains.	" Digitalis.....	5 to 20 drops.
Iodide of Potassium.....	2 to 10 grains.	" Ginger.....	$\frac{1}{4}$ to 1 teasp'ful.
Kino.....	10 to 30 grains.	" Gentian Com.....	$\frac{1}{2}$ to 2 teasp'fuls.
Mandrake.....	5 to 20 grains.	" Guaiac.....	$\frac{1}{2}$ to 1 teasp'ful.
Mercury with Chalk ..	2 to 8 grains.	" Kino.....	$\frac{1}{2}$ to 2 teasp'fuls.
Morphine.....	$\frac{1}{8}$ to $\frac{1}{4}$ grain.	" Lobelia.....	$\frac{1}{4}$ to 1 teasp'ful.
Muriate of Ammonia ..	5 to 20 grains.	" Muriate Iron.....	10 to 30 drops.
Opium.....	$\frac{1}{2}$ to 2 grains.	" Myrrh.....	$\frac{1}{2}$ to 1 teasp'ful.
Paregoric.....	1 teaspoonful	" Nux Vomica.....	5 to 10 drops.
Peppermint Essence.....	5 to 30 drops.	" Opium	
Pepsin.....	1 to 5 grains.	(Laudanum).....	10 to 25 drops.
Quinine.....	1 to 10 grains.	" Rhubarb.....	1 to 4 teasp'fuls.
Rochelle Salts.....	$\frac{1}{2}$ to 1 ounce.	" " & Senna.....	1 to 4 teasp'fuls.
Rhubarb.....	5 to 30 grains.	" Tolu.....	$\frac{1}{2}$ to 1 teasp'ful.
Salpetre.....	5 to 20 grains.	" Valerian.....	$\frac{1}{2}$ to 2 teasp'fuls.
Santonin.....	2 to 5 grains.	Turpentine.....	4 to 10 drops.
Syrup of Squills.....	$\frac{1}{2}$ to 1 teasp'ful.	Wine Ipecac (Diaph.).....	10 to 30 drops.
" Iodide of Iron.....	15 to 30 drops.	" " (Emetic).....	2 to 8 teasp'fuls.
" Senna.....	1 to 6 teasp'fuls.	" Colchicum Root.....	10 to 30 drops.

Children should take from $\frac{1}{8}$ to $\frac{3}{4}$ of a dose, according to age. Or divide the age of the child at its next birthday by 24 and take that fractional part of a dose for an adult.



*Always give Medicines strictly according to
Directions.*

HOW TO MEASURE MEDICINES.

- | | | |
|-------------------|--------|----------------------------|
| 1 teaspoonful | equals | 1 fluid drachm. |
| 1 dessertspoonful | " | 2 fluid drachms. |
| 1 tablespoonful | " | $\frac{1}{2}$ fluid ounce. |
| 1 wineglassful | " | 2 fluid ounces. |
| 1 teacupful | " | 4 fluid ounces. |
| 1 tumblerful | " | 8 fluid ounces. |
- 1 pint contains 2 tumblerfuls, or 16 fluid ounces.
 $\frac{1}{2}$ pint contains 1 tumblerful, or 8 fluid ounces.
1 gill contains 8 tablespoonfuls, or 4 fluid ounces.
1 pint of milk or water 1 pound.



HOME REMEDIES

.. AND ..

HOW TO USE THEM.



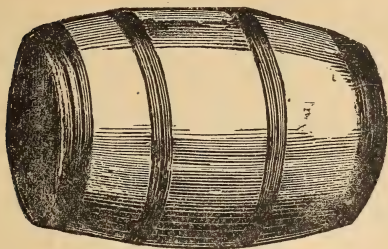
How to Gather and Prepare Medicinal Plants and Barks.

1. **BARKS** should be gathered as soon as they will peel easily in the spring.
2. **LEAVES AND HERBS** should be collected just before they begin to fade in autumn.
3. **FLOWERS**, when they first begin to blossom.
4. **SEEDS**, just before they are ripe.
5. **ROOTS** may be dug at any time, thoroughly washed, cleaned and dried.

THE AMERICAN POPLAR.

This is a good tonic, and is a good remedy for *chronic rheumatism, dyspepsia* and general *debility*. Use only the inner part, dried and powdered.

DOSE, a heaping teaspoonful three or four times a day.



The Wonderful Curative Properties of Common Salt.

1. Common salt possesses great curative properties, and it is an excellent household remedy, and always at hand.

2. Heated dry and applied to outer surface, over the seat of inflammation or congestion, it will give almost instant relief.

3. Applications of hot solutions of salt and water or vinegar will act like magic upon toothache, neuralgic headache, and other similar diseases.

4. For catarrh and sore throat a spray of warm water and salt, applied often, will cure almost every case, if taken in time. For hay fever, and those other slight forms of nasal diseases which produce constant sneezing, there is no remedy more quickly effective, and often curative, than the vapor of heated salt and alcohol. (Heat it very hot, and breathe the vapor for 10 minutes at a time, four or five times a day.)

5. For sensitive and bleeding gums, apply salt and cold water once or twice a day. A sure cure.

6. Slight bleeding can be easily checked by the use of salt and water.

7. Tender feet may be cured in a very short time by daily brisk rubbing with cold water and salt.

8. A pinch of salt in hot water, taken either just before or just after eating, greatly aids digestion, and has cured many cases of dyspepsia.

9. A cup of hot water and salt will sometimes quiet the severest vomiting when nothing else will.

10. *Caution.* Salt eaten with the food in too great quantities is very injurious. Too much salt dries up the blood, and gives the skin a yellow pallor.

BLACKBERRY.

1. The root is recommended for *diarrhœa*, *dysentery* and summer complaint in children.
2. Boil the small roots in a quart of water and reduce this quantity by boiling it down one half.
3. One or two tablespoonfuls may be given three or four times a day.

BURDOCK.

1. In *Scrofulous* or in obstinate *skin diseases* it is considered as one of the best home remedies.
 2. Take a handful of the freshly bruised root to two quarts of water and boil down one half.
- DOSE. Drink about one pint per day.

GARLIC.

1. GARLIC is recommended for *whooping-cough*, *coughs*, *colds*, *asthma* and *worms*.
2. It may be used by external application, or made into a syrup by adding white sugar, and taken in such quantities as may be deemed necessary.



GARLIC.

BLACK ELDER.

1. The flowers, the berries and the bark all possess medicinal properties.
2. An ointment made by stirring the fresh flowers into clean melted lard, and subsequently straining it, is an excellent remedy for *burns*, *scalds*, *wounds* and old obstinate sores.
3. The berries are laxative and are good in *rheumatism*, *gout*, *skin diseases* and *habitual constipation*.
4. The berries can be preserved by canning the same as any other fruit, or they may be dried.

CAMPHOR.

Applied externally in rheumatism, enlarged joints, bruises and sprains, spirits of camphor is considered one of the best of domestic remedies. One-half or one-fourth of a teaspoonful taken internally will cure colic, *diarrhœa*, and, in its first stages, it is considered an excellent remedy for a cold.

ALUM.

1. **ALUM** should always be kept in the house. It is one of the best remedies known to stop bleeding.

2. A heaping teaspoonful of powdered alum, placed in a common teacup of water, will stop the flow of blood in any ordinary wound where no large artery has been severed.

3. Snuffing a solution will stop bleeding of the nose.

4. A teaspoonful of powdered alum and molasses will cure the croup in children. It will also cure painter's colic.

5. A mild solution of alum will relieve inflamed eyes.

6. A wash made with a teaspoonful of alum and a quart of water, will prevent offensive sweating, and will often cure pimples on the face of young persons.

7. Burnt alum will remove proud flesh in wounds and sores.



BONESET OR THOROUGHWORT.

This is a good remedy for malarial diseases, chills and fevers, and is also a tonic.

DOSE. Make the leaves and flowers into a strong tea, and take about a wineglassful at a time.

BORAX.

A teaspoonful of powdered borax in a tumblerful of water makes an excellent wash for the face, and will often cure pimples and other eruptions. It is also good for sore mouth in nursing infants and small children.

Alum and borax together to cure sore nipples also. Bathe after each nursing.

CATNIP.

CATNIP is an excellent domestic remedy, and will produce active perspiration. Good for colds, headache and similar diseases.

DOSE. Make a strong tea and drink before retiring.

CINNAMON.

1. CINNAMON will relieve vomiting, cholic and diarrhœa.
2. A drop of oil of cinnamon will often relieve very serious toothache. Apply to tooth with a little cotton.



DANDELION ROOT AND PLANT.

DANDELION.

1. The dandelion is recommended for *biliousness, chronic inflammation of the liver, constipation and coughs.*

2. The root should be collected in July, August or September.

DOSE. A strong infusion may be drank freely two or three times a day, or the fluid extract can be procured at any drug store.



DOGWOOD BLOSSOMS.

DOGWOOD.

1. **DOGWOOD** is a familiar tree, the bark of which is good in *fever and ague*. It is also used as a *appetizer*.

2. Make a strong tea by boiling a handful of the bark in a quart of water.

DOSE. Take a wineglassful three times a day.

GINGER.

1. The medical virtues of ginger tea in relieving *colic, diarrhoea* and *indigestion*, cannot be questioned.

2. A cup of strong ginger tea, taken on going to bed, will often cure a cold.

3. Ginger tea may be taken copiously for any bowel trouble.

HOPS.

1. Hops have long been known to possess soothing and sleep-producing properties. A cup of strong hop tea will produce *pleasant sleep*.

2. A hop poultice will relieve the pain of a *bruise, a sprain* or other *injuries*.

FLAXSEED.

This is an excellent remedy for coughs, colds, disorders of the bowels, kidneys and bladder, etc.

PREPARATION. To make the best kind of flaxseed tea, place the seeds in a small linen bag and suspend the bag in a dish of water, four table-spoonfuls for each quart of water. After allowing the seeds to soak for several hours, remove the same and the tea will be ready for use. Add a little lemon juice for flavor.

DOSE. Give in quantities as may be necessary.

**FLAX.****HORSERADISH.**

1. It is an excellent remedy for *hoarseness, dropsy, rheumatism and palsy.*

2. Make a syrup by boiling the root, and add sufficient sugar to make it palatable.

DOSE. Two tea-spoonfuls two or three times a day.

JUNIPER.

The berries of the Juniper tree have always been considered as excellent home remedies in *dropsy, skin diseases and scrofula*, they may be eaten fresh or dry.

DOSE. Two tea-spoonfuls of berries two or three times a day. It is better to bruise them thoroughly with a hammer; breaking all the seeds before taking.

LEMON-JUICE.

1. Hot lemonade taken on retiring, will break up a cold in its first stages.

2. Some very serious cases of dropsy can be cured by eating lemons. The patient should commence by eating one lemon a day, and increase it until ten or fifteen are eaten each day.

3. Very strong lemonade, with but little sugar, will relieve influenza, cold in the head and inflammatory rheumatism if taken often.

4. It will remove ink-stains from white cloth, also iron rust, and freckles from the skin.



OLIVE OIL.

1. A wineglassful every few minutes, will relieve cramp colic.
2. A teaspoonful rubbed along the spine of a very young infant will loosen the bowels better than giving internal remedies.
3. Applications externally will soothe and relieve most all kinds of skin diseases.

KEROSENE OIL.

1. KEROSENE OIL will relieve rheumatic pains, sciatica and neuralgia.
2. Apply it with thorough and repeated rubbing of the affected parts.
3. It is also recommended for burns, scalds, sprains, bruises and sores. Apply in mild quantities.

LIME.

1. Allowing children to breathe the vapor from slaking lime, is good for croup and diphtheria.

2. Take about one-half pound of unslaked lime, and pour upon it a quart of hot water. Let it stand for a few hours, and draw off the clear liquid. This makes an excellent gargle in croup and diphtheria. It is also an excellent remedy for itching eruptions on the skin, such as hives, if applied externally. Taken inwardly, it will relieve immediately, heartburn and many forms of dyspepsia. It will also relieve bowel complaints of children, when the child has wind in the stomach and is restless and fretful.

LOBELIA.

1. LOBELIA is a common plant and is given as a remedy for *asthma*, *lockjaw* and *coughs*.

2. It is violent in its action and a fatal poison in overdoses. Care should be taken in reference to the quantity used. It is better and safer to allow the physician to prescribe it.

MAGNESIA.

MAGNESIA will relieve sour stomach, acidity of the stomach, heartburn, colic, dyspepsia and similar diseases. It is a mild laxative, suitable to children.

DOSE. Take a tea-spoonful as many times as may be required.

MUSTARD.

1. MUSTARD is an excellent household remedy. In cases of poisoning, when taken in large quantities, it will produce vomiting.

2. A tablespoonful of white mustard seed mingled with syrup, and taken once a day, will act gently on the bowels and is a beneficial remedy in dyspepsia and constipation.

RHUBARB.

RHUBARB will cure wind on the stomach, measles, and will act mildly upon the bowels. The aromatic syrup may be procured at the drug stores.

DOSE. A tablespoonful for an adult.



PENNYROYAL

PENNYROYAL.

1. PENNYROYAL will promote perspiration and is good for coughs and colds.

2. Make a strong tea and take at going to bed.

3. A warm foot-bath may accompany the medicine with good effects.

MANDRAKE or MAY-APPLE.

This is a stimulant, a tonic and a laxative. It is excellent for liver complaint, especially when it is in a torpid and inactive condition.

Dose. Dry and powder the root, and take about one teaspoonful. This dose may be repeated two or three times a day. Some persons

are more or less affected by it. The dose should be according to effects.

OAK-BARK.

1. OAK-BARK may be given with advantage in *fever and ague*, *diarrhœa* and *bleeding from the lungs*. It is also good as an external application.

2. The acorns, when roasted, are believed to be a remedy for *scrofula* and other *skin diseases*. A strong tea of the bark has also been recommended as a wash for *old sores* and *foul ulcers*.

3. A poultice made of powdered bark will relieve *pain*, and is also considered a good *remedy* for *sores* and *ulcers*.

Dose. Make a tea of the bark and take in such quantities as may be deemed necessary. No serious effects of an overdose.

PEACH-TREE BARK.

The bark of the peach-tree is sedative, and will control nausea and vomiting. It also possesses mild tonic properties.

Dose. Make a strong tea of the bark and drink a wine-glassful three times a day.

PEPPERMINT.

Externally applied it is an efficient remedy in neuralgia. It is good for sickness of the stomach, colic and cholera of children.

Dose. Essence of peppermint may be given in doses of from ten to twenty-five drops in water, or on a lump of sugar.

GOOSE GREASE.

Goose oil applied externally and internally is an excellent remedy for sore throat, hoarseness, coughs, etc.



SENNA LEAVES.

SNAKEROOT.

1. The Virginia Snakeroot when made into a strong tea, is useful as a gargle in sore throat, and will bring out the eruptions in scarlet fever and measles.

2. When the tea is taken internally, it will produce perspiration and will often cure a cold and rheumatism in the first stages.

SENNA.

SENNA is the leaves of a small tree which grows in northern Africa. It is a sure and safe purgative of modern power. It will cure costiveness and other similar troubles.

SASSAFRAS.

The bark made into a tea, makes a pleasant drink, and will relieve dysentery and inflammation of the bladder. It will also relieve inflammation of the eyes when applied externally.

SULPHUR.

Old cases of rheumatism are often improved by sulphur baths and sulphur tea. It will also cure the itch and loosen the bowels.

Dose. Powder sulphur and mix with molasses. A tea-spoonful three times a day.

SWEET FLAG.

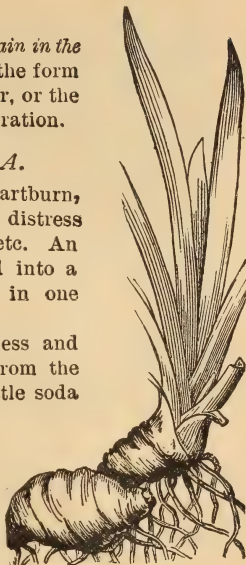
SWEET FLAG is recommended for *pain in the stomach or bowels*. It can be taken in the form of a tea, sweetened with a little sugar, or the root may be eaten without any preparation.

COMMON BAKING SODA.

1. This is good for sour stomach, heartburn, water-brash, and will often relieve distress in the stomach, sudden diarrhoea, etc. An even teaspoonful should be stirred into a wineglassful of water and taken in one dose; children according to age.

2. If children are wakeful, restless and cross, throwing up curdled milk from the stomach, nothing is better than a little soda and cold water. Soda will often relieve rheumatism, and soda-baths are very efficacious in curing various skin diseases.

3. CAUTION. The daily use of soda should not be carried too far, as it is liable to weaken the stomach, and thin the blood too much.



SWEET FLAG.

WILD CHERRY.

1. This is good for general weakness, poor digestion, lack of appetite, nervousness and coughs. It is also considered an excellent remedy for the first stages of consumption or palpitation of the heart.

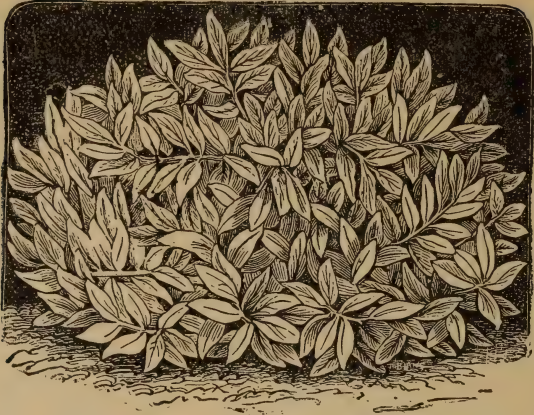
2. The parts used in medicine, are the berries and inner bark of the roots and branches.

DOSE. A heaping teaspoonful of the dried and powdered bark, soaked twenty-four hours in one quart of cold water. Take a wineglassful four or five times a day.

WILLOW.

1. The inner bark is a good remedy in fever and ague and similar diseases.

2. Make a strong tea of the inner bark, and take in quantities to suit the patient.

*SAGE.*

This is an excellent remedy for wind, colds, or night sweats.

DOSE. Make the same into a strong tea and drink a teacupful several times a day, or as emergency may demand.

SALTPETRE (NITRATE OF POTASH).

An excellent domestic remedy for inflammatory rheumatism, sore throat, asthma, dysentery, gravel, and skin diseases.

DOSE. Of a tablespoonful of powdered saltpetre stirred in a pint of cold water, take 2 or 3 tablespoonfuls every 2 hours. For gravel boil the same quantity in new milk and give 3 or 4 tablespoonfuls of the liquid to a dose. For sore throat it is used as a gargle. For asthma soak paper in a strong liquid of saltpetre water, then dry. Burn the paper and inhale the smoke and it will give speedy relief. For dysentery take a teaspoonful of powdered saltpetre and stir into a tumbler of water. Take a teaspoonful of this every hour.

RED PEPPER.

A teaspoonful of red pepper mixed with molasses and taken in one dose, is considered one of the best remedies for delirium tremens and sea-sickness.



HOT MILK AS A STIMULANT.

Hot milk is recommended by a medical journal as an excellent substitute for beer, whiskey, or other alcoholic stimulants, in cases of great fatigue and over-exertion of body and mind. Its reviving influence, when taken as hot as it can be sipped, is remarkable. Its effect is promptly felt and lasting, and even those who have been accustomed to the use of alcoholic beverages will find this substitute remarkably satisfying. This is especially true of overworked women, for whom physicians sometimes prescribe beer and other mild stimulants. The momentary exhilaration felt is only the whip applied to an exhausted body, while the hot milk is digested and gives nourishment and real strength.

Milk (not hot) is also quite fattening and children should always use it after the age of childhood. Some of the highest authorities in medicine attribute much of the scrofula and consumption which occurs in children about the age of twelve or fifteen to the general cessation of the use of milk at that period. When the system is exhausted and there is a falling off in flesh a milk diet should always be resorted to, and kept up until improvement was evident.

Ice cold milk should never be drank. Persons thin in flesh should drink at least a pint of milk daily. Drinking milk in the morning and at noon time is preferable. Skimmed milk is best for kidney diseases, but less nutritive as a nourishing drink. It is always best to drink milk with the cream stirred in when it can be obtained.



UNNATURAL POSITION.



NATURAL POSITION.

A VERY SIMPLE CURE FOR ROUND SHOULDERS.

Round shoulders are almost unavoidably accompanied by weak lungs, but may be cured by the simple and easily performed exercise of raising one's self upon the toes, leisurely, in a perpendicular position, several times daily.

Take a perfectly upright position, with the heels together and the toes at an angle of forty-five degrees. Drop the arms lifeless at the sides, animating and raising the chest to its full capacity muscularly, the chin well drawn in. Slowly rise up on the balls of the feet to the greatest possible height, thereby exercising all the muscles of the legs and body; come again into a standing position without swaying the body backward out of the perfect line. Repeat the exercise first on one foot and then on the other.



HEALTHY POSITION FOR THE HEAD AND BACK.

Home Remedies for Sleeplessness.

Many suffer from nervousness and a want of sleep. Many remedies have been given, but few have proven successful. The following are some of the best household remedies known.

1. A bath, taken just before retiring, is highly recommended. If this is not satisfactory wash the face, neck and hands in cold water, and then retire and keep the mind quiet.

2. If the trouble is a want of sleep after the first nap, get up and walk around the room two or three times. With some this is a sure remedy.

3. Lie with the head to the North, for there is no doubt something in the electrical effects of the earth upon the body when in that position.

4. Bad sleepers should always rise early and retire early, and they should never take a nap during the day.

5. Sleepless persons should avoid exciting conversation or reading, hard study, or any kind of mental excitement during the evening.

6. Tea and coffee should never be drank for supper.

7. When lying in bed, first draw in the breath slowly, letting it out suddenly, then draw it in suddenly and let it pass slowly out a number of times alternately. This is highly recommended.

8. A cup of hot water taken just before retiring will often produce the desired results.

HOW TO SLEEP.



UNHEALTHY POSITION FOR THE HEAD AND BACK.

Many diseases have their beginning in sleeping on high pillows.

9. Nervous and sleepless persons are often benefited by sleeping on a pillow of hops.

10. In case of nervous irritability a warm foot-bath will often produce sleep.

11. If the above home treatments are not sufficient, take from 5 to 10 grains of bromide of potassium just before retiring.

12. A brisk walk in the open air just before retiring will often affect a perfect cure.

The Pulse in Different Ages.

The natural rate of the pulse varies at different ages, as follows:

	<i>Beats per Minute.</i>
At Birth.....	130—140
One year.....	115—130
Two years.....	100—115
Three years.....	95—105
Four to seven years.....	85— 95
Seven to fourteen years.....	80— 90
Fourteen to twenty-one years.....	75— 85
Twenty-one to sixty years.....	70— 75
Old age.....	75— 85



How to Treat a Drowning Person.

Place the patient with face downward, and wrist under his forehead, so that the water can run out of his mouth and throat. Then restore breathing by turning the patient on his right side, and excite the nostrils with ammonia or snuff. Dash cold water upon the face and chest. If this is not effectual, turn the patient first upon his face and then upon his back gently, at the same time pressing the back between the shoulder blades gently with the hand. This assists forcing the air out of the lungs, and will stimulate respiration. As soon as breathing is established, apply warm flannels and bottles of hot water to the stomach and feet. Hot water bags can be used instead of hot bottles, if it is convenient.

HOW TO CURE A SNAKE BITE.

The part bitten swells to enormous proportions immediately, and assumes various colors, and the person bitten will pass from nausea and vomiting to delirium and unconsciousness. If death does not follow from the first effects, it is likely to follow from the fever and inflammation of the wound.

Treatment:—Suck the wound vigorously to withdraw the poison, and stop the circulation with a handkerchief and stick as shown on page 50. In all instances large and frequent drinks of brandy or whiskey with a free application of kerosene oil to the wound will prove an effectual remedy. Keep the wound tied up with a bandage soaked in kerosene oil. Give the patient all the liquor he can drink. It is always best to consult a physician as soon as possible.



DEATH GAS IN A WELL.

How to avoid it and how to get rid of it.

1. The gas which produces death in a well is what is called carbonic acid gas. It is much heavier than air, and consequently will always accumulate in the bottom of a well; and if an unsuspecting man goes into it he is at once suffocated, gasps for breath and falls; some one not understanding the cause of the trouble goes down, and he will also become a victim. Many lives are annually lost in this way.

2. To find out whether gas has collected in the well, let down a light, and if it goes out there is a good deal of gas in the well; if it burns dimly when it comes near the bottom, there is sufficient gas to make it dangerous.

3. A very good way for a man who goes down into a well is, to take a candle or a lamp with him, as shown in the above illustration. He must hold the candle considerably below his mouth, or it will do no good. If the light goes out or becomes very dim he should stop at once, for another step might bring him down into the gas, and one breath of this poisonous gas will render him senseless.



How to Tell Contagious Diseases and How Long They are Infectious.

The following points will help to determine the nature of a suspicious illness:

DISEASE.	Rash or Eruption.	Appearance.	Durat'n in days.	Remarks.
CHICKEN-POX.	Small rose pimples changing to vesicles.....	2d day of fever or after 24h'r's illness.....	6-7	Scabs from about 4th day of fever.
ERYSIPELAS..	Diffuse redness and swelling.....	2d or 3d day of illness.....		
MEASELS	Small red dots like flea bites.....	4th day of fever or after 72 hours' illness.....	6-10	Rash fades on 7th day.
SCARLET FEVER.	Bright scarlet, diffused.....	2d day of fever or after 24 hours' illness.....	8-10	Rash fades on 5th day.
SEALL-POX ..	Small red pimples changing to vesicles, then pustules.....	3d day of fever or after 48 hours' illness.....	14-21	Scabs form 9th or 10th d'y. fall off about 14th.
TYPHOID FEVER.	Rose-colored spots scattered.....	11th to 14th day	22-30	Accompanied by diarrhoea.

DISEASE.	Symptoms appear.	Period ranges from	Patient is Infectious.
CHICKEN-POX.....	On 14th day	10-18 days	Until all scabs have fallen off.
DIPHThERIA	" 2d day	2- 5 days	14d's after dis'pear'ce of membr'ne
MEASELS*.....	" 14th day	10-14 days	Until scali'g and co'gh have ceas'd
MUMPS.....	" 19th day	16-24 days	14 days from commencement.
ROTHELN.....	" 14th day	12-20 days	10-14 days from commencement.
SCARLET FEVER.	" 4th day	1- 7 days	Until a scaling has ceased.
SMALL-POX.....	" 12th day	1-14 days	Until all scabs have fallen off.
TYPHOID FEVER..	" 21st day	1-28 days	Until diarrhoea ceases.
WH'OP'G-CO'GH†	" 14th day	7-14 days	Six wks. from beginning to wh'op

*In measles the patient is infectious three days before the eruption appears.

†In whooping-cough the patient is infectious during the primary cough, which may be three weeks before the whooping begins.



A tablespoonful at bedtime of equal parts of castor oil and aromatic syrup of rhubarb is one of the best remedies for children with stomach and bowel trouble now in use.

Prescription :—2 oz. castor oil,
2 oz aromatic syrup of rhubarb



RULES FOR HOME NURSING.

1. The nurse, at home need not learn anything which will not be necessary for every woman to know or practice in her family at some time in her life. Remember nursing the sick must be mastered by careful study and attention. It cannot be mastered in a few careless and occasional observations.

2. Good intelligent nursing has often more to do with the patient's recovery than the medicine. Reading to patients (when they are not too sick) in a low, kind and gentle tone will often withdraw their minds from their own ills and brighten them up wonderfully. It is often worth more than a dose of medicine.

3. Nursing the sick consists of a knowledge of making up beds rapidly and comfortably; washing and cleansing patients; and an ability to study the patients wants in changing position; the giving of medicines, etc.

4. Learn to make an application of poultices, blisters, etc.

5. The use of baths and a knowledge of rubbing patients with the hands.



READING TO THE SICK.

6. How to attend a physician dressing wounds, bandaging and padding of splints.

7. How to make a record of physicians instructions with regard to sleep, taking of medicines, diet, etc.

8. How to observe and record temperature, respiration and pulse.

9. A thorough knowledge of the preparation of food and nourishing drinks for the sick is very necessary.

Fat, Water and Muscle Properties of Food.

100 parts.	Water.	Muscle.	Fat.	100 parts.	Water.	Muscle.	Fat.
Cucumbers.....	97.0	1.5	1.0	Mutton.....	44.0	12.5	40.0
Turnips.....	94.4	1.1	4.0	Pork.....	38.5	10.0	50.0
Cabbage.....	90.0	4.0	5.0	Beans.....	14.8	24.0	67.7
Milk, cow's	86.0	5.0	8.0	Buckwheat.....	14.2	8.6	75.4
Apples.....	84.0	5.0	10.0	Barley.....	14.0	15.0	68.8
Eggs, yolk of.....	79.0	15.0	27.0	Corn.....	14.0	12.0	73.0
Potatoes.....	75.2	1.4	22.5	Peas.....	14.0	23.4	60.0
Veal	68.5	10.1	1.65	Wheat.....	11.0	14.6	69.4
Eggs, white of.....	53.0	17.0	.0	Oats.....	13.6	17.0	66.4
Lamb	50.5	11.0	35.0	Rice.....	13.5	6.5	79.5
Beef.....	50.0	15.0	30.0	Cheese.....	10.0	65.4	15.0
Chicken	46.0	18.0	32.0	Butter.....			100.0



Hints and Helps for the Sick Room.

1. Keep the room clean and well ventilated, but avoid a draft. Take a board six inches wide, that just fits between the sides of the window at the bottom; raise the window six inches, put this board in, leaving one inch space between it and the window proper. In this way air can enter a room without creating a draft.

2. Never whisper or talk loud. Wear slippers or shoes that do not squeak.

3. Never bring a large quantity of food to a sick person; it will destroy instead of stimulate the appetite of the patient.

4. Always treat your sick as if they were your honored guests, and get out your best and prettiest dishes.

5. Make the sick-room as cheerful as you can, and keep the house quiet. Have shades on all the lamps.

6. Do not leave medicines where the patient can reach them, for a sick person will often do things which he would not do if well.

7. Humor the sick as much as possible, and avoid finding fault, scolding, or acknowledging that you are tired, etc.

8. Never go outside the door with the doctor. It creates suspicion on the part of the patient.

9. Be careful to avoid visitors as much as possible.

10. Change the pillows, sheets, etc., often, and wash the face and hands of the sick two or three times a day.

11. Be careful and not allow the patient to smell the cooking of food or anything else.

12. Do not take sewing into the room, or fuss around the room. Whatever is to be done, do it promptly.

13. Be kind, be cheerful, be careful, and do just as the doctor tells you.

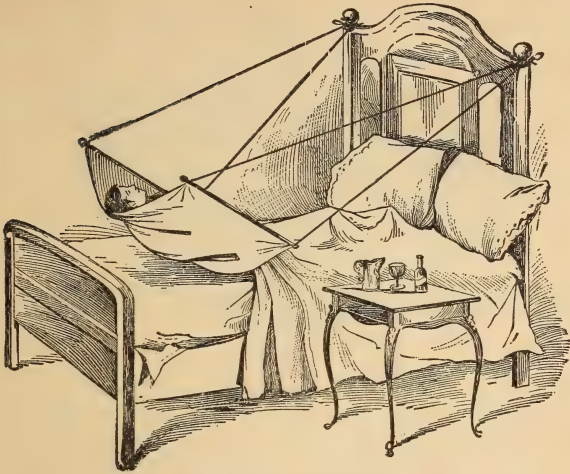


HAND STRAPS FOR THE SICK.

How the Sick may Help Themselves.

Put up iron screen sockets so stoutly that there can be no danger of giving way, and fasten half-inch rope to them and at the end of the rope put hand pieces of soft cloth or webbing. Set the sockets firmly in the wall about three feet apart so as to give room for all possible movement.

It is wonderful how a very sick person can move himself by taking hold of the hand straps. It is generally much better than could be done by the most skillful nurse, and creates less pain and suffering. The patient has the advantage of lifting himself to any position he may desire.

**THE NEW BED HAMMOCK.****How to Make an Easy Bed Hammock for the Sick.**

A bed hammock is a very simple but refreshing change for the sick when pillows refuse obstinately to "lie easy" or have grown hotly wearisome.

Take a bit of very stout cloth a yard deep and four feet long, after a double hem has been turned two inches deep across each end. Sew a long length of webbing stoutly to each of the four corners. Take two light rods, each a yard long; a small broomstick makes excellent ones. Put a stout screw-eye in either end of both rods, slip them into the hems, pass the webbing through the eyes and your work is complete. To use this bed hammock all that is required is to fasten the webbing to the bedposts on each side, then the sick person can recline at ease against the cloth. This hammock affords almost infinite variety of position. It can be shifted in almost any form. It may be padded with cushions or left cool and single. A person may sit upright in it and eat dinner, or may recline in any position. It is surely a wonderful change and relief for the sick.



Home Remedies and Home Treatment for All Diseases.

COLIC IN ADULTS.

SYMPTOMS.—Colic is a gripping pain in the bowels, chiefly about the navel, relieved by pressure, and often accompanied with a painful distension of the whole of the lower region of the bowels, with vomiting, costiveness, and spasmodic contraction of the muscles of the abdomen.

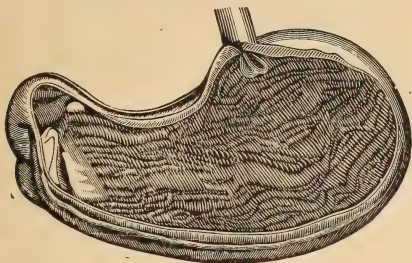
CAUSES.—The complaint is produced by various causes, such as indigestible fruits, long continued costiveness, cold, or it may be due, as in painter's colic, to poisoning by lead.

HOME TREATMENT.—Hot fomentations applied to the abdomen to relieve the pain, and a strong physic. One of the best is blue mass in 5 or 10 grains. Tepid water injection in the bowels, a few drops of peppermint in hot water, or strong catnip tea, will often give speedy relief. Keep the feet dry and avoid food, that disagrees with the patient.

HOMEOPATHIC TREATMENT.—Colocynth when cramps in region of the navel with diarrhoea. Nux vomica when from constipation and indigestible food. Chamomilla when in children. Ipecac, if vomiting is an accompanying symptom.

REGULAR TREATMENT.—If caused by some indigestible article of food, a dose of castor oil had better be given, say a tablespoonful for an adult, to which from ten to fifteen drops of laudanum may be added. If the pain is very severe a turpentine stupe may be applied over the abdomen. The following mixture will be found very useful in such cases: Solution

of the muriate of morphia, 2 drachms; spirit of chloroform, $\frac{1}{2}$ ounce; water to make 2 ounces. A teaspoonful to be given every two hours until the pain is relieved.



THE HUMAN STOMACH.

HOW TO CURE DYSPEPSIA.

CAUSE.—Excessive and fast eating, irregular time for meals, eating too much, sedentary habits, improper use of purgative drugs, hard study, or hard work just before or after meals, tight lacing, etc.

SYMPTOMS.—Irregular appetite, pain in the stomach, furred tongue, offensive breath, nausea, bad taste in the mouth in the morning, an irritable feeling in the stomach after each meal, sour or bitter fluids arising from the stomach, heart-burn, etc.

HOME TREATMENT.—Regular rest and regular exercise. Retire early and arise moderately early. Avoid eating pie, cake, pork, sausage, hard dried meats, cheese, lobsters, crabs, pastry of all kinds, canned salmon, soups, and newly baked bread; also all kinds of beer and liquors. Eat oat meal, cracked wheat, graham bread, and all kinds of fruits that will agree with the patient. Masticate the food thoroughly and eat slowly. Drink a glass of hot milk before each meal. A little pepsin taken immediately after each meal will often give great relief. Drink nothing while eating.

COMMON TREATMENT.—The following prescription is one of the best that is known and no doubt has cured as many people as any one prescription given by a physician :

"DYSPEPSIA CURE."

2 drachms hyposulphite of soda,
2 drachms sub. nit. bismuth.

Mix. Make into 12 powders.

Take 1 powder every 3 hours in little water or milk.

"EGYPTIAN DYSPSEPSIA CURE."

Powdered rhubarb, 2 drachms.
 Bicarbonate of soda, 6 drachms.
 Fluid extract of gentian, 3 drachms.
 Peppermint water, 7½ ounces.
 Mix them.

One teaspoonful in a little cold water half an hour before meals.

JAUNDICE.

CAUSE.—Excesses in eating and drinking; a debauch; dyspepsia, or the use of alcoholic drinks; some obstruction in the bile duct, as a gall stone or currant seed; malaria; climate, as cool nights succeeding warm days.

SYMPTOMS.—Derangement of the stomach and bowels, constipation, diarrhoea, or bitter taste in the mouth, thirst, indigestion, skin has a peculiar yellow color and itches, slight feverishness, whites of eyes yellow, stools become clay colored, and spirits depressed.

HOME TREATMENT.—Give a warm bath night and morning, adding to the water an ounce of carbonate of potassium, and give a good laxative, as a tablespoonful of epsom salts. Allow the patient to drink a glass of lemonade once in four hours made with bitartrate of potassium. Restrict the diet to milk if possible, avoiding all starchy, fatty or sweet articles of food.

BILIOUS ATTACKS.

SYMPTOMS.—Dizziness, loss of appetite, coated tongue, drowsiness, tired feeling, vomiting of bile, etc.

HOME TREATMENT.—Take a dessertspoonful of cream of tartar and stir it into a pint of boiling water, and when cool drink it on an empty stomach. Repeat this about twice a day. Then drink a good strong tea made from the root of dandelion two or three times a day, one good dose just before retiring. Or a little common soda taken two or three times a day will often give the desired results. A few doses of quinine will often be all that is necessary.

A Cure for Boils.

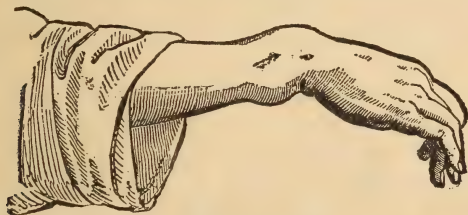
1. Take a good tonic of some kind, to stimulate the system and cleanse the blood. Some preparation of sarsaparilla is a very good remedy.

2. A good tonic will prevent other boils from coming.

3. Eat nourishing food, such as eggs, beefsteak, mutton, poultry, etc.

4. Apply bread and milk or flaxseed poultices, until ready to open.

5. After opening the boil thoroughly, and squeezing out all the pus, apply a warm poultice for a day, and then wash with castile soap or boracic acid, and dress it with soft linen until well.



A SPRAINED HAND.

How to Cure Bruises and Sprains.

For bruises and sprains there is nothing better than hot water, applied as warm as can be endured without too much pain. Apply the water with several thicknesses of flannel, and change it as soon as it gets cool. Applying cold water to bruises and sprains is an injury instead of a benefit. It should never be done. After a day or two any kind of liniment may be applied. Gentle rubbing after a few days will aid materially.

Burns and Scalds.

There is nothing better for burns and scalds than common baking soda. Apply a thick coating of the dry soda as quickly as possible. Bind a cloth over it, and keep this on until the pain has ceased. If the burn is very severe keep it on several days. Most any healing ointment will answer the purpose after the pain has ceased.

HOW TO CHECK VOMITING.

HOME TREATMENT.—A teaspoonful or two of hot water sometimes acts like a charm; a pinch of salt will often relieve vomiting; ice dissolved in the mouth, will often accomplish what other medicines will not; a mustard paste over the stomach is highly recommended. Much, however, depends upon the diet. If the stomach is in a restless condition, only the lightest kind of food should be taken, and it can be easily determined in a few days what food the stomach will or will not retain. Perfect rest is generally more necessary than food or medicine. For chronic vomiting lime water is one of the best remedies.

GENERAL TREATMENT.—Subnitrate of bismuth in 2 to 5 grain doses, or oxalate of cerium in one grain doses, or one drop of the tincture of ipecac, taken in a wineglassful of water.

HOMŒOPATHIC REMEDIES.—*Nux vomica* and *arsenicum*.

NEURALGIA.

CAUSE.—The cause is obscure in many cases. It may result from an impoverished condition of the blood. It may be caused by violent passions, strong emotions, excessive exercise, mental depression, malaria, or lead poisoning.

SYMPTOMS.—Sudden, sharp and darting pains feeling like red hot wires piercing the parts. The parts more commonly affected are the face, the muscles between the ribs, and the hip and leg. When it is in the hip and leg, it is generally called sciatica. It sometimes attacks the heart.

HOME TREATMENT.—Bathe the affected parts in salt water. Use nourishing diet. Neuralgia in the face is often relieved by taking a good active cathartic. An external application of peppermint is highly recommended. Eat plenty of fat meat, and avoid tea, but drink plenty of milk. Avoid exposure to dampness. For sciatica wear chamois-leather drawers.

GENERAL TREATMENT.—15 grains of carbonate of iron 3 times a day, taken in a little syrup. This treatment for a month or more will have beneficial effects. A seidlitz powder taken every morning, or a small quantity of cream of tartar or citrate of magnesia, will produce excellent results. Three grains of quinine three times a day may produce the desired results. For neuralgic headache take 15 grains bromide of potash 3 times a day.



HOW TO CURE THE HEADACHE.

DEFINITION—Megrin, hemicrania or sick-headache is a pain in the head coming on periodically and usually located in the left side of the head, accompanied by nausea and vomiting. Simple nervous headache may occur in any part of head, and comes on irregularly from many causes.

CAUSES.—The causes of headache are legion. Many diseases produce headache. Some of the most common causes are fever, colds, derangement of stomach or bowels (especially constipation), bad nutrition, and general debility. Rheumatic and gouty people are much subject to sick headache, and it is often hereditary. Insufficient sleep and mental worry are frequent exciting causes.

HOME TREATMENT.—Look for cause, and remove it if possible. Regulate the diet and keep the bowels in good condition. Plenty of out-door exercise with freedom from care, will prevent the attacks. For a throbbing headache, with flushed face, apply cold water or ice bag to the head. Hot foot bath and inhalation of camphor, or mustard plaster on back of neck. For headache with pallor of face, and faintness on standing, apply hot water to the head freely, and inhalations of ammonia will often relieve.

GENERAL TREATMENT.—For throbbing headache with flushed face, ten or fifteen grains of the bromide of potassium will often relieve. For headache with pale countenance the inhalation of the nitrite of amyl will, if employed early, often

cut short an attack of sick headache. The following may be used occasionally :

2 scruples of phenacetine,
10 grains of citrate of coffeine.

Mix and make into twenty capsules.

Take one when necessary.

Cannabis Indica taken in gradually increasing doses for many months will sometimes cure the headache permanently. Begin with $\frac{1}{4}$ of a grain taken morning and evening, and gradually increase, until two grains or more are taken at a dose.

SICK HEADACHE.

CAUSE.—Eating indigestible food, a lack of sufficient sleep, constipation, anxiety, want of out-door exercise, etc.

SYMPTOMS.—Dizziness, pain in the forehead and temples, blurred sight, nausea and vomiting.

HOME TREATMENT. — Moderate diet, avoiding all rich gravies, late suppers, or stimulating drinks. Take a Seidlitz powder every morning and evening, or drink a cup of strong catnip tea just before retiring, or take two teaspoonfuls of finely powdered charcoal in half a glass of milk. Cover up warmly and perspire freely.

HOME TREATMENT FOR DIARRHŒA.

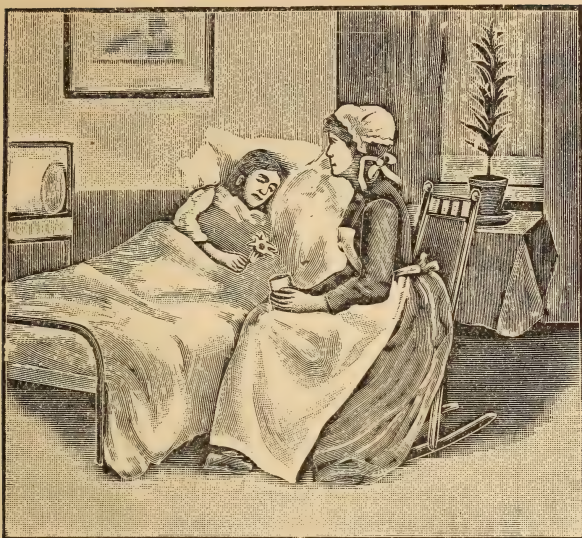
Great care should be taken not to check the difficulty too soon. Look first carefully to the food and eat only moderately and very nutritious and very easily digested food. Rest and quiet is always necessary to promote a cure. If this is not sufficient, take half a teaspoonful of common soda three times a day, or take a few doses of rhubarb syrup, or blackberry cordial or blackberry wine.

"DR. DANIEL'S DIARRHŒA REMEDY."

Tinct. Rhubarb, 1 ounce,
Tinct. Catechu, 2 ounces,
Tinct. Jam. Ginger, 1 ounce,
Paregoric, 2 ounces,
Lime Water, 2 ounces. Mix.

1 teaspoonful in a little cold water, every time the bowels move.

Dr. Daniels has used this remedy in his extensive practice for over thirty years, and it always effects a cure.



LUNG FEVER OR PNEUMONIA.

CAUSES.—Overexertion, exposure to cold, heart disease, wounds, foreign substance in the lungs, bronchitis, etc.

SYMPTOMS.—Cold in the chest, loss of appetite, restlessness and chills, high fever, quick pulse, and rapid breathing, a patch of red on one or both cheeks, the expectorations of a rusty color or streaked with blood. Pain in the chest is always a prominent symptom.

HOME TREATMENT.—Cloths rung out of cold water laid over the chest and renewed every ten minutes, or hot fomentations applied to the chest, well regulated diet, and some good active stimulant. A good dose of castor oil or citrate of magnesia is very beneficial. A flaxseed poultice half an inch thick placed entirely around the chest is highly recommended. Keep the room at an even temperature.

GENERAL TREATMENT.—

Bi-carbonate of potash, 2 drachms,
Syrup of gum arabic, 3 fluid ounces.

Mix and give a dessertspoonful in water 6 times every twenty-four hours.



How to Nurse Typhoid Fever.

Physicians say that in many diseases nursing is of more importance than medicine. This is especially true of typhoid fever. It has to run a certain course, which cannot be cut short by medicine. The vital question is whether the strength of the patient can be so husbanded as to keep him alive until the poison has spent itself. The seat of the disease is in the small intestine, which is ulcerated. The danger is that these ulcers may perforate the coat of the intestine and cause death. There is an unreasoning fear of typhoid fever as a contagious disease. It is not infectious if it is properly nursed. It can only be communicated from the discharges, and if these are thoroughly disinfected there is no danger. A plentiful supply of pure air is the first requisite. The room should be ventilated, and the temperature kept at 65°. If possible the carpet should be taken up and the floor about the bed wiped up each day with a cloth, wrung out of a solution of bichloride of mercury, fifteen grains to a quart of water. A druggist will weigh powders of sixty grains each. One of these can be added to a gallon of water and the liquid used for disinfectant purposes. It is a deadly poison.

The clothing should be changed whenever it is necessary. It is inexcusable to permit soiled clothing to remain near the patient because he is supposed to be too weak to bear having it replaced with fresh. If properly done it will not even tire or distress him.

HOW TO CURE THE GRIPPE.

DEFINITION.—This wide-spread distemper, socalled La Grippe, is not yet fully understood. It probably is due to some kind of bacteria. The Grippe has characteristics similar to those of a severe cold.

SYMPTOMS.—General debility, decided soreness and bone-ache all over the body, especially in the back and lower limbs. Much pain back of the head or over the eyes.

HOME TREATMENT.—Live on a pure milk diet for several days. If milk does not agree add a large tablespoonful of lime water for each teacupful. Boil the milk before giving it to the patient and let him sip it with a teaspoon, instead of drinking it.

GENERAL TREATMENT.—In connection with the above treatment give the patient 3 grains of quinine, and $1\frac{1}{2}$ hours after, 4 grains of "Antifebrin," a recently discovered valuable preparation, which can be purchased at any drug store. Repeat the dose of quinine and Antifebrin every three hours, making them alternate every $1\frac{1}{2}$ hours. Continue until the attack is broken up.



HOW TO CURE FELONS.

SYMPTOMS.—Throbbing pain, which is often felt up the arm; tender to the touch; hand of a dusky red color.

HOME TREATMENT.—Apply poultices wet with laudanum, or wash in a solution of carbolic acid to soften the parts; wipe dry and apply a coat of collodion and give the patient a good dose of physic.

GENERAL TREATMENT.—If the above treatment is not suffi-

cient, go to a physician and have it lanced so as to lay open the flesh to the bone.

CARBUNCLES.

Carbuncles are nothing more or less than large boils accompanied with more or less pain and constitutional disturbances.

HOME TREATMENT.—First look after the general health of the patient and administer an easily digested diet. Give a few stimulants or tonics. Apply large flaxseed poultices to the carbuncle. If the carbuncle is very large and painful, the family physician should be consulted.

HOW TO REMOVE WARTS.

To destroy warts apply a mixture of *chromic acid* and water, equal parts, or an application of *carbolic* or *nitric acid* will have the same effect, or rub the warts night and morning with *sal amoniac* moistened in water. This will remove them in a short time.

DYSENTERY OR BLOODY FLUX.

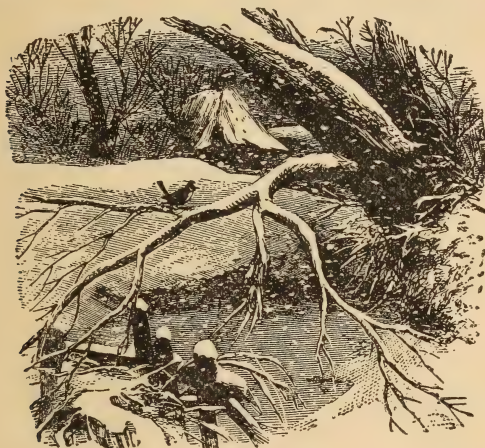
CAUSES.—Exposure to wet and cold in the chillness of the evening, sleeping on damp ground, or between damp sheets, malaria, errors in diet, bad air, excessive fatigue, etc.

SYMPTOMS.—Begins with diarrhœa, loss of appetite, nausea and very slight fever for two or three days; then the true dysenteric symptoms begin, to-wit: pain or pressure over the abdomen, colicky pains about umbilicus, burning pain in rectum with constant desire to go to stool; stools contain blood, mucus and pus, and are evacuated with straining and pain; bloody and offensive discharges from the bowels.

HOME TREATMENT.—Keep the patient quiet. It is best for the patient to remain in bed, though the attack be mild. Eat chicken broth, or other soups, and very light food, such as milk, cream, rice, etc. A little ice kept in the mouth is very soothing and will often relieve vomiting. Apply woolen cloths wrung out of hot water to which a few drops of turpentine have been added. Washing out the rectum with tepid or hot water adds much to the comfort of the patient, and has a curative effect. A teaspoonful of charcoal every morning and evening will produce good results. Blackberry tea made from

the blackberry root is very beneficial. If these remedies are not sufficient, a competent physician should be consulted at once.

HOMŒOPATHIC TREATMENT. — Bryonia alternately with aconite every three hours. If there is severe headache give belladonna.



A CURE FOR FROST BITES.

If any portion of the body has been frozen, keep the person away from all heat until you can apply snow or cold water. Rub the parts carefully, but thoroughly, until the frozen flesh becomes soft and assumes a natural color. It is best to rub the frozen part an hour or more while thawing. Apply olive oil or lard after the rubbing has been completed.

INJURY FROM A RUSTY NAIL OR WIRE.

When anyone is injured by running a nail or wire into the flesh, hold the wound over burning sugar as soon as possible and it will prevent the poisonous effect, and little, if any, soreness will be the result.

HOW TO CURE NIGHTMARE.

CAUSE.—Nightmares are probably the result of indigestion, late suppers, too much excitement or hard thinking, cold feet, costiveness, flatulence, etc.

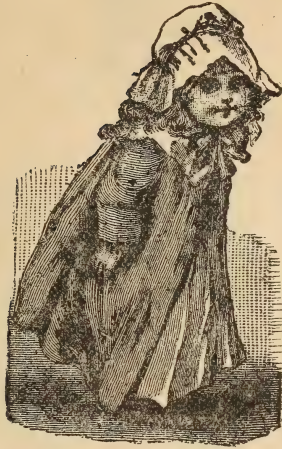
HOME TREATMENT.—Avoid the causes and eat light suppers. Sleep with another person. A little cayenne pepper or baking soda, taken just before retiring, will be found efficacious.

CRAMPS AND CRAMP COLIC.

HOME TREATMENT.—For cramp colic give a wineglassful of olive oil. For cramps, rubbing the parts thoroughly with the hands or a piece of flannel will generally produce relief. The application of turpentine or spirits of hartshorn, rubbed on with the hand, is highly recommended. A teaspoonful of the Painkiller given on page 151, taken internally, will generally produce instant relief.

Time Required for Digestion.

	Hrs.	Min.		Hrs.	Min.
Apples, sweet.....	1	30	Mutton, roast.....	3	15
“ sour.....	2	00	“ broiled.....	3	00
Beans, pod, boiled.....	2	30	“ boiled.....	3	00
Beef, fresh, rare, roasted.....	3	00	Oysters, raw.....	2	55
“ “ dried.....	3	30	“ roast.....	3	15
“ “ fried.....	4	00	“ stewed.....	3	30
Beets, boiled.....	3	45	Pork, fat and lean, roast.....	5	15
Bread, wheat, fresh.....	3	30	“ “ boiled.....	3	15
“ corn.....	3	15	“ “ raw.....	3	00
Butter (melted).....	3	30	Potatoes, boiled.....	3	30
Cabbage, with vinegar, raw.....	2	00	“ baked.....	2	30
“ boiled.....	4	30	Rice boiled.....	1	00
Cheese (old, strong).....	3	30	Sago “.....	1	45
Codfish.....	2	00	Salmon, salted, boiled.....	4	00
Custard, baked.....	2	45	Soup, beef, vegetable.....	4	00
Ducks, domestic, roasted.....	4	00	“ chicken boiled.....	3	00
“ wild, “.....	4	30	“ oyster “.....	3	30
Eggs, fresh, hard, boiled.....	3	30	Tapioca, boiled.....	2	00
“ “ soft “.....	3	00	Tripe, soured, boiled.....	1	00
“ “ fried.....	3	30	Trout, fresh, boiled or fried.....	1	30
Goose, roast.....	2	00	Turkey, domestic, roast.....	2	00
Lamb, fresh, boiled.....	2	30	“ wild, roast.....	2	18
Liver, beef, boiled.....	2	00	Turnips, boiled.....	3	30
Milk, boiled.....	2	00	Veal, fresh, broiled.....	4	00
“ raw.....	2	15	“ “ fried.....	4	30
Parsnips, boiled.....	2	30	Venison steak, broiled.....	1	35

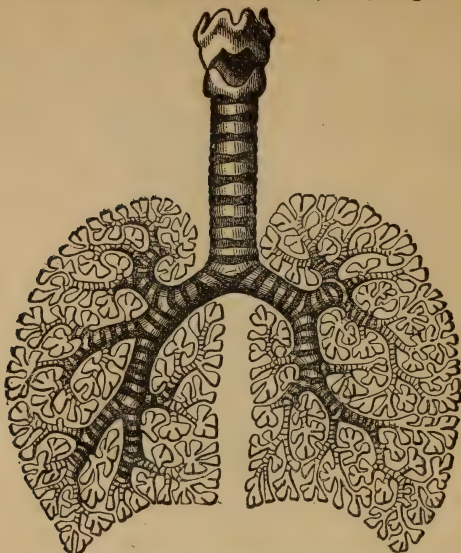


How to Stop Nose-Bleeding.

There are many remedies given, such as putting ice on the forehead, or water on the neck, but these are of little or no value. Ordinary nose-bleeding may be stopped by snuffing cold water up the bleeding nostril. If this fails after a few trials, place a little salt in the water. Filling the nose with the corner of a handkerchief for a few moments is a good remedy ; or grasping the nose with the thumb and forefinger, and holding it firmly closed for a few moments, will generally cure the severest cases in a very short time.

HEARTBURN (Acidity of the Stomach).

There is no such thing as heartburn. What is commonly called heartburn, is nothing more nor less than acidity of the stomach, or a derangement of the digestive organs, and can be easily remedied by taking half a tablespoonful of powdered magnesia, or half a teaspoonful of saleratus, or by drinking a little lime water, or by dropping a few burning coals of hard-wood in a tumbler of water, and drinking the water.



HOW TO ASCERTAIN THE STATE OF THE LUNGS.

Draw in as much breath as you can conveniently, then count as long as possible in a slow and audible voice without drawing in more breath. The number of seconds must be carefully noted. In a consumptive the time does not exceed 10, and is frequently less than 6 seconds; in pleurisy and pneumonia it ranges from 9 to 4 seconds. When the lungs are sound, the time will range as high as from 20 to 35 seconds. To expand the lungs, go into the air, stand erect, throw back the head and shoulders, and draw in the air through the nostrils as much as possible.

After having then filled the lungs, raise your arms, still extended, and suck in the air. When you have thus forced the arms backward, with the chest open, change the process by which you draw in your breath, till the lungs are emptied. Go through the process several times a day, and it will enlarge the chest, give the lungs better play, and serve very much to ward off consumption.

How to Cure a Cold.

The first thing necessary is to get up a free and copious sweating. The object is to get the blood in active circulation and open the pores so that the poisonous matter can be thrown out through the skin.

Remedies.

1. A hot foot-bath and a good dose of strong ginger tea just before going to bed. Retire and cover warmly.
2. A hot foot-bath and a pint of hot lemonade taken just before going to bed will produce good results.
3. Flaxseed tea or a mild cathartic will often break up a cold
4. If the cold is accompanied by a cough, give the following prescription :

1 ounce of Compound Syrup of Squills.
1 ounce of Syrup of Wild Cherry.

Mix, and take a teaspoonful every 2 hours.

Also see Home Remedies.

An Excellent Cough Syrup.

Syrup of Rhubarb 4 ounces.
Syrup of Ipecac 4 ounces.
Syrup of Senega 4 ounces.
Syrup of Morphia 12 ounces.

Mix them thoroughly.

Take a half teaspoonful every 3 or 4 hours for an adult, children in proportion to age.

Shake well before using.

German Cough Syrup.

Syrup of Morphia 3 ounces.
Comp. Syrup of Tar $3\frac{1}{2}$ ounces.
Chloroform..... $\frac{1}{4}$ Troy ounce.
Syrup of W. Cherry 2 ounces.
Glycerine..... 1 ounce.

Mix thoroughly.

Always shake the bottle before using.

1 teaspoonful 3 or 4 times a day.

Catarrh Cure.

Carbolic Acid, pure..... 1 drachm.
Glycerine..... 4 drachms.
Distilled Water..... 1 drachm.
Fluid Extract of Stramonium 2 drachms.

Mix them.

Dilute 1 drachm of the mixture with 4 ounces of water, and use with a nasal douche.



**"DR. DANIELS' CELEBRATED EXTERNAL
RHEUMATIC REMEDY."**

Fluid ext. of belladonna, 1 ounce,
Fluid ext. of aconite root, $\frac{1}{2}$ ounce,
Fluid ext. of colchicum seed, 1 ounce,
Fluid ext. of arnica, 1 ounce,
Chloroform, 1 ounce.

Mix the fluid extracts together first, then add the chloroform, and shake all together thoroughly. Always shake well before using.

To be applied externally *only*, and thoroughly rubbed in.

RHEUMATISM.

Rheumatism is divided into acute, chronic, and muscular.

ACUTE RHEUMATISM is sometimes called rheumatic fever. This is generally brought on by exposure to cold, and affects the joints, which become painful and swollen.

CHRONIC RHEUMATISM is similar to acute rheumatism, with the exception that there is an absence of increased heat and redness. It is supposed to be the same as the acute form, only it is milder, but more persistent.

MUSCULAR RHEUMATISM is a disease which affects the muscles, and often shifts from one place to another, but usually remains fixed in the muscles first attacked. The muscles in the back part of the neck and shoulders are very frequently attacked. Also the muscles of the back.

CAUSE.—Usually an inherited tendency ; exciting causes or exposure to cold, excessive meat diet and insufficient exercise.

SYMPTOMS.—Pain in the joints, tenderness, swelling or redness of the skin, swelling of the joints, and soreness of the muscles.

HOME TREATMENT.—Wrap the red or swollen parts in flannel soaked in hot water or in a hot solution of common baking soda and water. Small mustard plasters placed over the affected joints or parts are highly recommended. Two or three tablespoonfuls of lemon juice in a glass of water three or four times a day often produce excellent results. For muscular rheumatism keep the affected parts warm and bathe two or three times a day with arnica. Rub it in with a course flannel, stimulating the muscles by thorough rubbing. A hot bath at bed time to induce free perspiration.

A rheumatic person should wear woolen garments next the skin and also sleep in warm blankets during the cold season of the year. Take a good dose of rhubarb at bed-time.

NERVOUSNESS.

It is not a disease, but it is a derangement of the nervous system, and may be produced by various causes : mental work, fatigue, anxiety, etc.

HOME TREATMENT.—Rest ; a cloth wet with cold water tied upon the head at night ; a good bath every day. Diet of graham bread, milk, with plenty of cream and the fat of beef and mutton. Seek for the cause and remove it if possible.

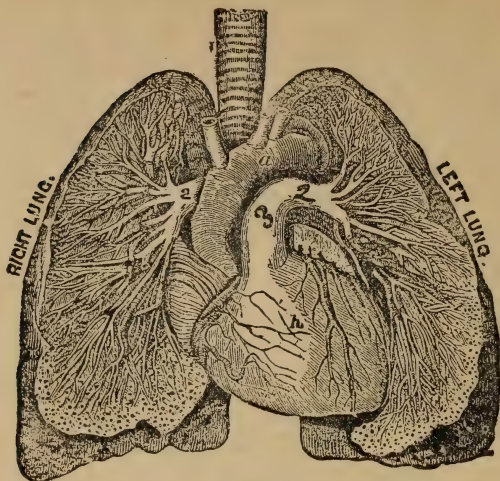
PLEURISY.

CAUSE.—Violent strain or injury. It may be caused by other diseases, such as erysipelas, rheumatism, measles, etc., but it is generally caused by sudden cold or exposure to dampness.

SYMPTOMS.—It generally begins with a chill and a stitching pain in the side.

HOME TREATMENT.—In the first stages of the disease home treatment will generally be sufficient. A spirit vapor bath ; hot fomentations applied to the chest ; or, hot plates wrapped in a flannel and applied to the chest is excellent.

GENERAL TREATMENT.—Give 2 or 3 drops of the tincture of aconite every 3 hours. If the patient is weak this remedy should not be persisted in.



ASTHMA.

CAUSE.—It is hereditary in many people. It may be caused by fog, smoke, fumes of various things, as new hay, etc., indigestion, heart disease, nervous condition, exposure, or bronchitis.

SYMPTOMS.—The symptoms are so well known that very little description is necessary. Loud and frequent coughing, wheezing, shortness of breath, and sometimes nausea and vomiting.

HOME TREATMENT.—Those suffering from asthma should eat only easily digested food. Eat light suppers and avoid catching cold. Shower baths every morning are highly recommended if the patient is sufficiently strong. Drinking strong coffee is sometimes a great relief in a fit of asthma. Burning nitre-paper and inhaling the fumes is very effective. Smoking jimson-weed (thorn-apple) is an excellent remedy in some cases. Keep the bowels open.

GENERAL TREATMENT.— $\frac{1}{2}$ ounce of the tincture of lobelia; $\frac{1}{2}$ ounce of the wine of ipecac. Take a half teaspoonful every half hour until expectoration begins, or, take 5 grains of iodide of potassium in syrup and water three times a day.

HOW TO CURE A SORE THROAT.

HOME TREATMENT.—Sage tea as a gargle and also as a drink. Make a gargle of the following prescription :

Chloride of potash, 1 drachm,
Tincture of iron, 20 drops,
Water, 1 glass.

Mix, and gargle the throat every hour.

A DOMESTIC REMEDY.

2 tablespoonfuls of common salt,
2 tablespoonfuls of strained honey,
3 tablespoonfuls of vinegar,
 $\frac{1}{4}$ teaspoonful of camphor.

Mix and gargle the throat a dozen times a day.

EXTERNAL APPLICATION FOR SORE THROAT.

Wring a cloth out of salt and cold water and keeping it quite wet, bind tightly about the neck and cover with a dry cloth. It is best to use this at night.

INCONTINENCE OF URINE.

DEFINITION.—When a person cannot retain urine, and also has a frequent desire to urinate. It is a troublesome and annoying disease. One may be passing urine unconsciously during sleep, or may dribble away, which generally causes chafing and soreness.

CAUSES.—In children it may be caused by worms, or drinking too much water before retiring, or injuries or weakness of the organ. In adults, paralysis of the bladder or weakness.

HOME TREATMENT.—Avoid all acid or salty food, tea, coffee and alcoholic liquors. The patient should take a cold bath every day, rubbing the skin thoroughly with a rough towel after each bath ; have out-door exercise ; sleep on a hard mattress, and avoid hot drinks toward evening.

REGULAR TREATMENT.—If the difficulty is worms, that should be remedied at once ; if caused by paralysis or weakness of the bladder, take one drop of tincture of cantharides three times a day and keep the bowels open.

DIABETES, (*Excessive Quantities of Urine.*)

CAUSES.—It is difficult to say what causes this disease, but it is generally conceded to be exposure, intemperance, injuries and certain fevers. It is as common to men as to women.

SYMPTOMS.—Excessive quantities of urine of a very pale yellowish hue or quite colorless, which contains sugar in large quantities ; thirst, lassitude, and great dryness and harshness of the skin, also loss of flesh

HOME TREATMENT.—Avoid all food containing starch and sugar, such as bread, vegetables, pie and cake. Eat meats of all kinds, eggs and bran bread, drink skim-milk and butter-milk; coffee may be taken without sugar. Avoid severe exercise, and bathe the skin thoroughly and frequently. A competent physician should be consulted.

GRAVEL.

DEFINITION.—Gravel is caused by small stony substances which form in the kidneys or the bladder, and are often passed with the water. Some are subject to gravel every few months, but where the stone becomes large an operation is necessary.

SYMPTOMS.—Pain in the end of the penis, constant desire to make water, pain in the bladder just before urinating, bloody urine. The only way to determine the existence of a gravel in the bladder is by the use of a surgical instrument. If the patient suffers from any of the above symptoms, the family physician should be consulted at once.

HOME TREATMENT.—Avoid intoxicating liquors and drink only soft water, lemonade, milk, cider, alkaline, mineral and soda waters; avoid eating sugar, butter, fat meat, and exercise freely out of doors. The patient should take a tumbler of cold water an hour before dinner and at bed time; frequent baths and warm clothing are necessary. When suffering from pain, drink a copious quantity of flax-seed tea.

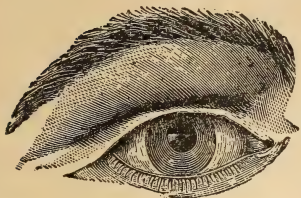
BRIGHT'S DISEASE.

DEFINITION.—Bright's disease is a disease of the kidneys known by the presence of a substance called albumen in the urine. It is more frequently caused by the use of alcoholic liquors, exposure to cold, wet, etc.

SYMPTOMS.—A pale and puffy appearance of the face; general pains and weakness; headache and lassitude.

HOME TREATMENT.—A good test for Bright's Disease is the following: Take a wineglassful of urine and put into it a few drops of *nitric acid*; if the patient is suffering from Bright's disease, the urine will have a white cloudy appearance. Hard work and severe exercise must be avoided. Wear good warm flannel next to the skin; keep the bowels open and take a warm bath every day. Take cod liver oil, drink skim-milk and eat nourishing food. If dropsy makes an appearance; it may be checked by drinking freely of cream of tartar lemonade.

HOW TO DOCTOR SORE EYES.



CAUSE.—Exposure to cold, dust, injuries, catarrh, scarlet fever, measles, etc. When the eye feels as if there were fire sand in it, a competent physician should be at once consulted, because it is a symptom of inflammation which demands special attention.

HOME TREATMENT.—Bathe the eyes every two or three hours in warm water. Place a few grains of alum in the water before using. Cleanliness is very necessary. The application of a cloth moistened with a solution of aconite in the proportion of one part of aconite to twenty of water will prove soothing and beneficial. Never apply hot fomentations to the eye without consulting a physician. A rubber bag or bladder filled with pounded ice and held to the eye is a good and safe remedy.

CAMPBORATED EYE WATER.

15 grains sulphate of copper,
15 grains French bole,
4 grains camphor,
4 ounces boiling water.

Infuse, strain, and dilute with 2 quarts of cold water and apply three times a day.

How to Cure Earache.

HOME TREATMENT.—Apply hot fomentations, or drop into the ear equal parts of laudanum and sweet oil. A pillow of hops or salt heated and applied to the ear will often furnish relief. If an insect gets into the ear, drop into the ear a few drops of sweet oil. If there is a discharge in the ear, it should be syringed out every day with warm water and the family physician consulted.



CONSTIPATION.

DEFINITION.—Inactivity of the intestines or bowels, due to weak condition of the muscular walls of the bowels—or the lack of a proper amount of fluid—from deficient secretions of bile, intestinal fluid, or often from a lack of fluid diet.

CAUSES.—Dyspepsia, sedentary habits, disease of the liver, character of food, irregular habits, malaria, and lead poisoning.

SYMPTOMS.—In healthy condition the majority of persons have one stool each day. In constipation, the bowels are moved every three or four days, with great straining and distress.

HOME TREATMENT.

1. Beware of harsh purgatives, they make matters worse.
2. A *regular hour* each day must be established for *going to stool*.
3. *Sufficient time* must be taken to permit the bowels to become thoroughly evacuated.

4. Careful regulation of the diet; not too much nor too little food should be taken. Avoid tea, cheese, crackers, all highly seasoned food, and eat plenty of fruit with coarse bread, such as graham, and cornmeal, ginger-bread made with molasses, and oatmeal porridge. Plenty of water should be taken between meals.

These rules should be rigidly enforced before any permanent cure can be hoped for.

An orange eaten before breakfast, or at night before retiring, often acts well.

A glass of hot water taken half an hour before breakfast with a pinch of salt is beneficent.

REGULAR TREATMENT.

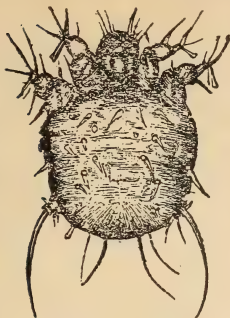
If the above rules are complied with, the following may be used with benefit:

Fluid extract of cascara sagrada, 4 drachms,
Glycerine, $1\frac{1}{2}$ drachms,
Syrup sarsaparilla, $2\frac{2}{3}$ drachms.

Take one teaspoonful an hour after meals, or once a day as needed.

A glycerine suppository or a teaspoonful of glycerine, used as an enema, may act well.

In acute cases a dose of epsom salts or castor oil should be used, or an injection of warm soap suds.



THE ITCH INSECT.

How to Cure the Itch.

The itch is an infectious skin disease caused by little animals called animalculæ, which burrow in the skin and cause intense itching.

2. CAUSE.—Bad air, unwholesome food, unventilated houses, dirty beds and clothing. It can only be communicated by contact.

3. SYMPTOMS.—It begins with slight eruptions between the fingers, on the finger joints, on the wrist, under the arms, on the thighs, etc.

4. REMEDY.—Keep the bowels open and regular. Take flower of sulphur and lard or fresh butter enough to make a good ointment and anoint the body all over every night before retiring. Wash thoroughly with warm water every morning.

5. Take internally a teaspoonful of flower of sulphur and molasses once a day.

6. After cure burn clothes or bake them several hours in a hot oven.

ITCH OINTMENT.

Unsalted butter,	1 pound.
Burgundy pitch,	2 ounces.
Powdered saltpetre,	1 drachm.
Powdered sulphur,	1 pint.

Melt, and mix thoroughly together and apply every evening.

TYPHOID FEVER.

DEFINITION.—An acute self-limited disease, due to a special poison; characterized by dull headache, fever, followed by stupor and delirium, diarrhœa, tenderness of abdomen, which may show a peculiar eruption, rapid prostration and slow convalescence.

CAUSE.—Special typhoid germ called the *bacillus typhosus*, which gains entrance to the system through infected water, milk, ice, meat or other food. The atmosphere is never impregnated with the fever germs.

SYMPTOMS.—Feeling of lassitude, headache, disturbed digestion and sleeplessness, coated tongue, chill or chilliness followed by fever, which is higher in the evening and gradually increases. Diarrhœa usually, and on the seventh day an eruption resembling flea-bites on abdomen. At the end of the third week the disease reaches its highest stage and the fever gradually abates.

HOME TREATMENT.—Keep the patient quiet, and give plenty of fresh air and a nourishing liquid diet. Milk is the best; never give solid food, and give the milk in small quantities every two or three hours. Turpentine stupes applied over the abdomen to relieve the pain, and cool drink or pellets of ice slowly dissolved in the mouth to quench the thirst. Good nursing is of great importance. The urine and stools should be promptly disinfected to prevent the spread of the disease, and a physician should be consulted.

MALARIA.

(AGUE CHILLS AND FEVER—INTERMITTENT FEVER.)

DEFINITION.—Disease characterized by a cold, a hot and a sweating stage, followed by an interval of complete intermission; varying in length from a few hours to several days.

CAUSE.—A special germ called *bacillus malaria*, aided by exposure to sudden cold, over-exertion, excess in eating and drinking, etc.

SYMPTOMS.—Chill, nausea and great thirst, followed by fever and headache, which gradually subsides as perspiration begins, after which the person feels quite well, till the next chill comes on.

TREATMENT.—During the intermission, give a brisk purgative followed by ten or twenty grains of quinine given three to five hours before the chill is expected. Repeat once or twice, and the paroxysms will be broken up.

The fever is most frequent in swampy districts, and to insure a permanent cure, the patient must remove to a dry, healthful locality.

HOW TO CURE PILES.

DEFINITION.—Piles are divided into two kinds, internal and external, according to the location.

CAUSE.—Habitual constipation, violent horseback riding, indigestion, the use of strong cathartics, dysentery, wearing corsets, eating highly-seasoned food, etc.

HOME TREATMENT.—Use an injection of a pint of cold water every morning and take a few grains of rhubarb daily ; this will often cure cases of long standing, or take an injection of alum and water of the strength of one or two teaspoonfuls of alum to a pint of water, or take two grains of sulphate of iron to an ounce of water. An injection of this will stop the bleeding.

Where there is much pain a hip-bath of fifteen to twenty minutes, if the pain is very severe it will produce relief. Apply a bread and milk poultice four or five times a day is also a good remedy.

CHOLERA MORBUS.

CAUSE.—It is more prevalent in warm than in cold climates. It is usually the result of eating excessively of indigestible articles ; such as unripe fruits, uncooked vegetables, melons, or intoxicating drinks.

SYMPTOMS. — Nausea, vomiting and purging, cramps and pains, sometimes intense thirst and quick pulse.

HOME TREATMENT.—Let the patient remain quiet and lie in bed. Take a teaspoonful of saleratus every two or three hours, or make a good strong tea of rhubarb root and drink freely. Drop a few live hardwood coals in a tumbler of water, and drink the water ; repeat this every two hours. Or make a strong tea of the leaves or bark of the peach tree, and drink freely every few minutes. Avoid drinking cold water.

Any of the above domestic remedies will be found efficient and helpful.

NIGHT SWEATS.

Night sweats are generally a symptom of weakness, and can easily be remedied by toning up the system by eating nourishing food, such as beefsteak, oatmeal, cracked wheat, baked potatoes, fruits, etc. A good tonic may be taken. Bathe the body in salt water every other day. A good dose of sage tea before retiring will prove very beneficial.

HOW TO CURE

Apoplexy, Bad Breath and Quinsy.

1. **Apoplexy.**—Apoplexy occurs only in the corpulent or obese, and those of gross or high living.

Treatment.—Raise the head to a nearly upright position, loosen all tight clothes, strings, etc., and apply cold water to the head and warm water and warm cloths to the feet. Have the apartment cool and well ventilated. Give nothing by the mouth until the breathing is relieved, and then only draughts of cold water.

2. **Bad Breath.**—Bad or foul breath will be removed by taking a teaspoonful of the following mixture after each meal: One ounce chloride of soda, one ounce liquor of potassa, one and one-half ounces phosphate of soda, and three ounces of water.

3. **Quinsy.**—This is an inflammation of the tonsils, or common inflammatory sore throat; commences with a slight feverish attack, with considerable pain and swelling of the tonsils, causing some difficulty in swallowing; as the attack advances, these symptoms become more intense, there is headache, thirst, a painful sense of tension, and acute darting pains in the ears. The attack is generally brought on by exposure to cold, and lasts from five to seven days, when it subsides naturally, or an abscess may form in tonsils and burst, or the tonsils may remain enlarged, the inflammation subsiding.

Home Treatment.—The patient should remain in a warm room, the diet chiefly milk and good broths, some cooling laxative and diaphoretic medicine may be given; but the greatest relief will be found in the frequent inhalation of the steam of hot water through an inhaler, or in the old-fashioned way through the spout of a teapot.



HOW TO CURE DYSPEPSIA AND WEAK LUNGS
by Morning Exercise.

Make a frame that will fit in the door, that can be easily taken apart and put together, and then go through the following exercise :

Stand in a walking position, one foot in advance of the other,

your hands on your hips, and twist the trunk to the side of the rear foot as far as possible ; then change feet and twist to the opposite side. Repeat fifteen times to each side. Do the same twisting with your hands clasped behind your neck, your shoulders well held back.

Stride standing. Rise on your toes and bend your knees outward and downward. Repeat ten times slowly.

Stand on one foot, your hips firm, and slowly raise your other leg, extended in front; keep a steady balance. Change feet and repeat.

Stand with your heels together, your hands on your hips. Bend your body forward, to the side, backward and to the opposite side; then forward to complete the circle. Repeat and rotate your body in opposite directions.

Lie on your face, with your hips firm and your feet held under a bureau; try to raise your head and shoulders as far as possible, with deep inspiration. Repeat, turning your body.

Bend your body over a bar in the doorway, or your stair railing, backward, forward and sideways, with your hands clasped behind your neck.

Place your bar low ; hang under it with your body extended stiffly and resting on your heels. Slowly draw your chest up to touch the bar by bending your elbows outward. Repeat.

Combine these movements with deep respiration, opening a window for good, pure air; make each exercise as useful to the muscles as possible; they are corrective exercises—not merely amusing. Rub your stomach with cold water after the exercise. This treatment persevered in, with self-restraint at the table, is the best for dyspepsia and weak lungs.



A GOOD CONSTITUTION.



Diseases of Women.

DISORDERS OF THE MENSES.

I. SUPPRESSION OF, OR SCANTY MENSES.

Home Treatment.—Attention to the diet, and exercise in the open air promote the general health. Some bitter tonic taken with fifteen grains of dialyzed iron, well diluted, after meals, if patient is pale and debilitated. A hot foot bath is often all that is necessary.

2. PROFUSE MENSTRUATION.

Home Treatment.—Avoid highly seasoned food and the use of spirituous liquors; also excessive fatigue; either physical or mental. To check the flow, patient should be kept quiet and allowed to sip cinnamon tea during the period.

3. PAINFUL MENSTRUATION.

Home Treatment.—Often brought on by colds. Treat by warm hip baths, hot drinks, (avoiding spirituous liquors) and heat applied to the back and extremities. A teaspoonful of the fluid extract of viburnum will sometimes act like a charm.

Happiness Promotes and Unhappiness Retards the Monthlies.

1. The fact that women are more loving, tender and bewitching during the period and soon after menstruation than all the rest of the month, shows that menstruation and the affections are closely united.

2. **Free Menstruation.**—All women, whether in love or in the full enjoyment of domestic happiness, menstruate more freely and regularly and with less pain than one suffering disappointments or bereavements. The woman who loses a loved husband or a lover, menstruates less and with much more pain.

3. **Girls in love** menstruate freely, and a happy marriage also promotes free menstruation until impregnated.

4. **Cohabitation during Menstruation** often causes flooding.

5. **Female Suppressions** before marriage are largely due to love starvation. If a patient thus afflicted could fall in love with some worthy young man, who honestly reciprocated her affection, a speedy restoration of the menses would soon take place. Married women unhappily married, frequently suffer from menstrual suppressions.

6. **Falling of the Womb and other ailments** are often due to love disappointments, or unhappy marriages. Happiness promotes health and unhappiness disease, while love seems to be a general panacea for many ills.

7. **Do not pine, moan,** and dwell and pore over, and lament over your love lossess, for the mental state of a broken heart is a serious condition which may develop many diseases, often causing a life-long suffering, if not death. Unhappy love is a fatal disorder that must be cured. Medicines are powerless if not injurious.

8. **Remember, your disease is mental,** and the remedy must be intelligent self-control, and remember to bring the mind in a right state, and the remedy is sure and certain. Trust in Him who doeth all things well, and you will find consolation and help.

LEUCORRHEA OR WHITES.

HOME TREATMENT.—This disorder, if not arising from some abnormal condition of the pelvic organs, can easily be cured by patient taking the proper amount of exercise and good nutritious food, avoiding tea and coffee. An injection every evening of one teaspoonful of Pond's Extract in a cup of hot water, after first cleansing the vagina well with a quart of warm water, is a simple but effective remedy.

INFLAMMATION OF THE WOMB.

HOME TREATMENT.—When in the acute form this disease is ushered in by a chill followed by fever, and pain in the region of the womb. Patient should be placed in bed and a brisk purgative given. Hot poultices applied to the abdomen, and the feet and hands kept warm. If the symptoms do not subside, a physician should be consulted.

HYSTERIA.

DEFINITION.—A functional disorder of the nervous system of which it is impossible to speak definitely; characterized by disturbance of the reason, will, imagination and emotions, with sometimes convulsive attacks that resemble epilepsy.

SYMPTOMS.—Fits of laughter, and tears without apparent cause. Emotions easily excited; mind often melancholy and depressed. Tenderness along the spine, disturbances of digestion, with hysterical convulsions, and other nervous phenomena.

HOME TREATMENT.—Some healthy and pleasant employment should be urged upon women afflicted with this disease. Men are also subject to it, though not so frequently. Avoid excessive fatigue and mental worry; also stimulants and opiates. Plenty of good food and fresh air will do more good than drugs.



HOW TO CURE SWELLED AND SORE BREASTS.

Take and boil a quantity of chamomile and apply the hot fomentations; this dissolves the knot and reduces the swelling and soreness.

Falling of the Womb.

Causes.—The displacement of the womb usually is the result of too much childbearing, miscarriages, abortions, or the taking of strong medicines to bring about menstruation. It may also be the result in getting up too quickly from the childbed. There are, however, other causes, such as a general breaking down of the health.

Symptoms.—If the womb has fallen forward it presses against the bladder, causing the patient to urinate frequently. If the womb has fallen back, it presses against the rectum, and constipation is the result with often severe pain at stool. If the womb descends into the vagina, there is a feeling of heaviness. All forms of displacement produce pain in the back, with an irregular and scanty menstrual flow and a dull and exhausted feeling.

Home Treatment.—Improve the general health. Take some preparation of cod-liver oil, hot injections (of a teaspoonful of powdered alum with a pint of water), a daily sitz-bath, and a regular morning bath three times a week will be found very beneficial. There, however, can be no remedy successfully used unless the womb is first replaced in its proper position. This must be done by a competent physician, who should be frequently consulted.



DREAMING OF A BETTER LAND. .

1. **Woman's Beauty.**—What is beauty in a woman? Not one particular point of excellence in form and feature, but a blending of all the perfections of detail of which the various parts of the human body are capable, and added to these perfections, perfect health. Every woman desires to be beautiful, for she well knows how irresistible is the influence of beauty upon all men.

2. **Good Health.**—Woman from the cradle to the grave is an object of constant interest; she calls forth alike the admiration of the philosopher and the praises of the poet. In every situation of life, wife, mother, sister, virtuous woman is loved and revered more than all on earth besides. Woman to fulfill her mission must be blessed with good health. A beautiful invalid is only a care and a sorrow, while health alone is the greatest beauty.

3. **Women do not Know Themselves.**—Partly through heedlessness, false modesty, or the reticence of their physicians, they live and die in entire ignorance of facts that should be known to every female from the age of puberty. There is a general ignorance among women of a class of diseases which are fast unfitting them for the high duties of continuing the race.

4. **Female Diseases.**—Most diseases are common to both sexes, but in addition women are subject to a class of distressing complaints peculiar to themselves, and are called female diseases. The sufferers from these maladies are usually so uninformed regarding their complaints, that they know not in what direction to look for relief, or what remedy would be proper in the case, should any be suggested. This is a deplorable fact, and especially in a nation where female intelligence on all other subjects is so marked.

5. **Fearful Ignorance.**—Works for popular distribution have shut out this subject through considerations of delicacy, and physicians to a great extent conceal information that every woman should possess. Hence this fearful ignorance.

6. **Woman's Duty.**—Woman's duty is apparent. Whether she be maid, wife, or mother, she can and must be enabled to interpret her own symptoms; to subdue them, and to aid her less enlightened friends. This happy condition will surely be realized, for it is right according to nature and the great laws of morality.

Secure a copy of our Search Lights and you will find just the information that every woman needs on the important subject of *female diseases*.

Barrenness and Its Remedy.

119

1. **The Vital Period.**—It is now a well understood physiological fact that the time immediately before and



especially after the monthly sickness is the period most favorable to conception, and many women who have supposed themselves to be barren, have by learning this fact conceived and born children.

2. **Cessation of the Menses.**—Menstruation is in close sympathy with fecundity. The first disturbance is a sign of the awakening of the faculty of reproduction, and when the menses cease altogether, it is certain that a state of barrenness exists.

Cessation during pregnancy is only temporary.

3. **A New Idea.**—If the wife after the act of generation will rest quietly for some time on the bed, it will greatly facilitate the possibility of conception.

4. **New Recommendations.**—The womb and breast are in close sympathetic union and the stimulation of one will excite the other, and by the discovery of this physiological fact many wives have taken advantage of it, and have secured the full accomplishment of their wishes. The application of a strong infant to the breast, fomentations of warm milk, or the use of the breast pump three or four times a day before the menstrual period, have worked some wonderful results to those who it was supposed were totally barren.

5. **Sterility.**—Sterility is often overcome by excessive horseback exercise, the improvement of the constitution by active employment for the mind and for the muscles, and a thorough system of tonics. In case of sterility, first, ascertain the cause, and the remedy many times will be found very simple. A sterile wife should therefore be slow of giving up all hope of ever becoming a mother.



Words for Young Mothers.

The act of nursing is sometimes painful to the mother, especially before the habit is fully established. The discomfort is greatly increased if the skin that covers the nipples is tender and delicate. The suction pulls it off, leaving them in a state in which the necessary pressure of the child's lips cause intense agony. This can be prevented in a great measure, says Elizabeth Robinson Scovil, in *Ladies' Home Journal*, if not entirely, by bathing the nipples twice a day for six weeks before the confinement with powdered alum dissolved in alcohol; or salt dissolved in brandy. If there is any symptom of the skin cracking when the child begins to nurse, they should be painted with a mixture of tannin and glycerine. This must be washed off before the baby touches them and renewed when it leaves them. If they are

very painful, the doctor will probably order morphia added to the mixture. A rubber nipple shield to be put on at the time of nursing, is a great relief. If the nipples are retracted or drawn inward, they can be drawn out painlessly by filling a pint bottle with boiling water, emptying it and quickly applying the mouth over the nipple. As the air in the bottle cools, it condenses, leaving a vacuum and the nipple is pushed out by the air behind it.

When the milk accumulates or "cakes" in the breast in hard patches, they should be rubbed very gently, from the base upwards, with warm camphorated oil. The rubbing should be the lightest, most delicate stroking, avoiding pressure. If lumps appear at the base of the breast and it is red, swollen and painful, cloths wrung out of cold water should be applied and the doctor sent for. While the breast is full and hard all over, not much apprehension need be felt. It is when lumps appear that the physician should be notified, that he may, if possible, prevent the formation of abscesses.

While a woman is nursing she should eat plenty of nourishing food—milk, oatmeal, cracked wheat, and good juicy, fresh meat, boiled, roasted, or broiled, but not fried. Between each meal, before going to bed, and once during the night, she should take a cup of cocoa, gruel made with milk, good beef tea, mutton broth, or any warm, nutritive drink. Tea and coffee are to be avoided. It is important to keep the digestion in order and the bowels should be carefully regulated as a means to this end. If necessary, any of the laxative mineral waters can be used for this purpose, or a teaspoonful of compound licorice powder taken at night. Powerful cathartic medicines should be avoided because of their effect upon the baby. The child should be weaned at nine months old, unless this time comes in very hot weather, or the infant is so delicate that a change of food would be injurious. If the mother is not strong her nursing will sometimes thrive better upon artificial food than on its natural nourishment. By gradually lengthening the interval between the nursing and feeding the child, when it is hungry, the weaning can be accomplished without much trouble.

A young mother should wear warm underclothing, thick stockings and a flannel jacket over her night dress, unless she is in the habit of wearing an under vest. If the body is not protected by warm clothing there is an undue demand upon the nervous energy to keep up the vital heat, and nerve force is wasted by the attempt to compel the system to do what ought to be done for it by outside means.





The Care of New-Born Infants.

1. The first thing to be done ordinarily is to give the little stranger a bath by using soap and warm water. To remove the white material that usually covers the child use olive oil, goose oil or lard, and apply it with a soft piece of worn flannel, and when the child is entirely clean rub all off with a fresh piece of flannel.

2. Many physicians in the United States recommend a thorough oiling of the child with pure lard or olive oil, and then rub dry as above stated. By these means water is avoided, and with it much risk of taking cold.

3. The application of brandy or liquor is entirely unnecessary, and generally does more injury than good.

4. If an infant should breathe feebly, or exhibit other signs of great feebleness, it should not be washed at once, but allowed to remain quiet and undisturbed, warmly wrapped up until the vital actions have acquired a fair degree of activity.

5. **Dressing the Navel.** — There is nothing better for dressing the navel than absorbent antiseptic cotton. There needs be no grease or oil upon the cotton. After the separation of the cord the navel should be dressed with a little cosmoline, still using the absorbent cotton. The navel string usually separates in a week's time; it may be delayed for twice this length of time, this will make no material difference, and the rule is to allow it to drop off of its own accord.

6. **The Clothing of the Infant.** — The clothing of the infant should be light, soft and *perfectly* loose. A soft flannel band is necessary *only* until the navel is healed. Afterwards discard bands entirely if you wish your babe to be happy and well. Make the dresses "Mother Hubbard"—Put on first a soft woolen shirt, then prepare the flannel skirts to hang from the neck like a slip. Make one kind with sleeves and one just like it without sleeves, then white muslin skirts (if they are desired), all the same way. Then baby is ready for any weather. In intense heat simply put on the one flannel slip with sleeves, leaving off the shirt. In Spring and Fall the shirt and skirt with no sleeves. In cold weather shirt and both skirts. These garments can be all put on at once, thus making the process of dressing very quick and easy. These are the most approved modern styles for dressing infants, and with long cashmere stockings pinned to the diapers the little feet are free to kick with no old-fashioned pinning blanket to torture the naturally active, healthy child, and retard its development. If tight bands are an injury to grown people, then in the name of pity emancipate the poor little infant from their torture!

7. **The Diaper.** — Diapers should be of soft linen, and great care should be exercised not to pin them too tightly. Never dry them, but always wash them thoroughly before being used again.

8. The band need not be worn after the navel has healed so that it requires no dressing, as it serves no purpose save to keep in place the dressing of the navel. The child's body should be kept thoroughly warm around the chest, bowels and feet. Give the heart and lungs plenty of room to heave.

9. The proper time for shortening the clothes is about three months in Summer and six months in Winter.

10. Infant Bathing.—The first week of a child's life it should not be entirely stripped and washed. It is too exhausting. After a child is over a week old it should be bathed every day ; after a child is three weeks old it may be put in the water and supported with one hand while it is being washed with the other. Never, however, allow it to remain too long in the water. From ten to twenty minutes is the limit. Use Pears' soap or castile soap, and with a sponge wipe quickly, or use a soft towel.



NURSING.

1. The new-born infant requires only the mother's milk. The true mother will nurse her child if it is a possibility. The infant will thrive better and have many more chances for life.

2. The mother's milk is the natural food, and nothing can fully take its place. It needs no feeding for the first few days as it was commonly deemed necessary a few years ago. The secretions in the mother's breast are sufficient.

3. **Artificial Food.** — Tokology says : "The best artificial food is cream reduced and sweetened with sugar of milk. Analysis shows that human milk contains more cream and sugar and less casein than the milk of animals.

4. Milk should form the basis of all preparations of food. If the milk is too strong, indigestion will follow, and the child will lose instead of gaining strength.

Weaning. — The weaning of the child depends much upon the strength and condition of the mother. If it does not occur in hot weather, from nine to twelve months is as long as any child should be nursed.

Food in Weaning. — Infants cry a great deal during weaning, but a few days of patient perseverance will overcome all difficulties. Give the child purely a milk diet, Graham bread, milk crackers and milk, or a little milk thickened with boiled rice, a little jelly, apple sauce, etc., may be safely used. Cracked wheat, oatmeal, wheat germ, or anything of that kind thoroughly cooked and served with a little cream and sugar, is an excellent food.

Milk Drawn from the Breasts. — If the mother suffers considerably from the milk gathering in the breast after weaning the child, withdraw it by taking a bottle that holds about a pint or a quart, putting a piece of cloth wrung out in warm water around the bottle, then fill it with boiling water, pour the water out and apply the bottle to the breast, and the bottle cooling will form a vacuum and will withdraw the milk into the bottle. This is one of the best methods now in use.

Return of the Menses. — If the menses return while the mother is nursing, the child should at once be weaned, for the mother's milk no longer contains sufficient nourishment. In case the mother should become pregnant while the child is nursing it, should at once be weaned, or serious results will follow to the health of the child. A mother's milk is no longer sufficiently rich to nourish the child or keep it in good health.

Care of the Bottle. — If the child is fed on the bottle, great care should be taken in keeping it absolutely clean. Never use white rubber nipples. A plain form of bottle with a black rubber nipple is preferable.

CHILDREN should not be permitted to come to the table until two years of age.

Chafing. — One of the best remedies is powdered lycopodium; apply it every time the babe is cleaned; but first wash with pure castile soap; Pears' soap is also good. A preparation of oxide of zinc is also highly recommended. Chafing sometimes results from an acid condition of the stomach; in that case give a few doses of castoria.

Colic. — If an infant is seriously troubled with colic, there is nothing better than camomile or catnip tea. Procure the leaves and make tea and give it as warm as the babe can bear.

FEEDING INFANTS.

1. The best food for infants is mother's milk ; next best is cow's milk. Cow's milk contains about three times as much curd and one-half as much sugar, and it should be reduced with two parts of water.

2. In feeding cow's milk there is too little cream and too little sugar, and there is no doubt no better preparation than Mellin's food to mix it with (according to directions).

3. Children being fed on food lacking fat generally have their teeth come late ; their muscles will be flabby and bones soft. Children will be too fat when their food contains too much sugar. Sugar always makes their flesh soft and flabby.

4. During the two first months the baby should be fed every two hours during the day, and two or three times during the night, but no more. Ten or eleven feedings for twenty-four hours is all a child will bear and remain healthy. At three months the child may be fed every three hours instead of every two.

5. Children can be taught regular habits by being fed and put to sleep at the same time every day and evening. Nervous diseases are caused by irregular hours of sleep and diet, and the use of soothing medicines.

6. A child five or six months old should not be fed during the night—from nine in the evening until six or seven in the morning, as overfeeding causes most of the wakefulness and nervousness of children during the night.

7. If a child vomits soon after taking the bottle, and there is an appearance of undigested food in the stool, it is a sign of overfeeding. If a large part of the bottle has been vomited, avoid the next bottle at regular time and pass over one bottle. If the child is nursing the same principles apply.

8. If a child empties its bottle and sucks vigorously its fingers after the bottle is emptied, it is very evident that the child is not fed enough, and should have its food gradually increased.

9. Give the baby a little cold water several times a day.

INFANTILE CONVULSIONS.

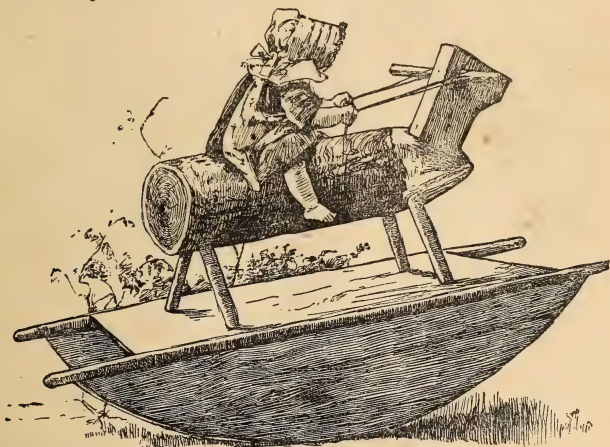
Definition.—An infantile convulsion corresponds to a chill in an adult, and is the most common brain affection among children.

Causes.—Anything that irritates the nervous system may cause convulsions in the child, as teething, indigestible food, worms, dropsy of the brain, hereditary constitution, or they may be the accompanying symptom in nearly all the

acute diseases of children, or when the eruption is suppressed in eruptive diseases.

Symptoms.—In case of convulsions of a child parents usually become frightened, and very rarely do the things that should be done in order to afford relief. The child, previous to the fit, is usually irritable, and the twitching of the muscles of the face may be noticed, or it may come on suddenly without warning. The child becomes insensible, clenches its hands tightly, lips turn blue, and the eyes become fixed, usually frothing from the mouth with head turned back. The convulsion generally lasts two or three minutes; sometimes, however, as long as ten or fifteen minutes, but rarely.

Remedy.—Give the child a warm bath and rub gently. Clothes wrung out of cold water and applied to the lower and back part of the head and plenty of fresh air will usually relieve the convulsion. Be sure and loosen the clothing around the child's neck. After the convulsion is over, give the child a few doses of potassic bromide, and an injection of castor oil if the abdomen is swollen. Potassic bromide should be kept in the house, to use in case of necessity.



THE OLD-TIME ROCKING-HORSE.

A Practical Rule for Feeding a Baby on Cow's Milk.

Cow's milk is steadily growing in favor as an artificial food. Country milk should be used instead of milk purchased in town or city.

RULE.—Take the upper half of milk that has stood an hour or two, dilute, not hardly as much as a third, with sweetened water, and if there is a tendency to sour stomach, put in a teaspoonful of lime water to every quart. The milk and water should both be boiled separately. If the baby is constipated, it is best to heat the milk over boiling water and not allow it to boil.

INFANT FOOD FOR 24 HOURS.

Age of Child.	Milk.	Water.	Total.
2 to 10 days.....	1¼ gills.....	3¼ gills.....	4½ gills
10 to 20 days.....	1¾ gills.....	4¼ gills.....	6 gills
20 to 30 days.....	2½ gills.....	6 gills.....	8½ gills
1 to 1½ months.....	3 gills.....	6¾ gills.....	9¾ gills
1½ to 2 months.....	3½ gills.....	7 gills.....	10½ gills
2 to 2½ months.....	4 gills.....	7½ gills.....	11½ gills
2½ to 3 months.....	4½ gills.....	7½ gills.....	12 gills
3 to 3½ months.....	5 gills.....	7½ gills.....	12½ gills
3½ to 4 months.....	5½ gills.....	7½ gills.....	13 gills
4 to 4½ months.....	6 gills.....	7½ gills.....	13½ gills
4½ to 5 months.....	6½ gills.....	7½ gills.....	14 gills
5 to 6 months.....	7 gills.....	7 gills.....	14 gills
6½ to 7 months.....	7½ gills.....	6½ gills.....	14 gills
7 to 8 months.....	8 gills.....	6 gills.....	14 gills
8 to 9 months.....	8¼ gills.....	6 gills.....	14¼ gills
9 to 10 months.....	8½ gills.....	6 gills.....	14½ gills
10 to 11 months.....	8¾ gills.....	6 gills.....	14¾ gills
11 to 12 months.....	9 gills.....	5½ gills.....	14½ gills
12 to 15 months.....	9¼ gills.....	5¼ gills.....	14½ gills
15 to 18 months.....	9½ gills.....	5 gills.....	14½ gills
18 and more months.....	10 gills.....	5 gills.....	15 gills



Why So Many Children Die.

Inquire whether one or both the parents of those numerous children that die around us, have not weak lungs, or a debilitated stomach, or a diseased liver, or feeble muscles, or else use them but little, or disordered nerves, or some other debility or form of disease. The prevalence of summer complaints, colic, cholera infantum, and other affections of these vital organs of children is truly alarming, sweeping them into their graves by the million. Shall other animals rear nearly all their young, and shall man, constitutionally by far the strongest of them all, lose half or more of his? Is this the order of nature? No, but their death-worm is born in and with them, and by parental agency. Parents should learn to govern and guard well their own health, then they will not impart disease to their children. Children are cursed and must suffer because of the ignorance or indifference of their parents. Sickly and diseased parents should observe the true physiological laws and avoid bringing children into existence only to wither and die,



OUR KING.

The Proper Time For Weaning.

1. **The Healthiest Children are Those Weaned at Nine Months.** — It is generally recognized that the healthiest children are those weaned at nine months complete. Prolonged nursing hurts both child and mother; in the child,

causing a tendency to brain disease, probably through disordered digestion and nutrition; in the mother, causing a strong tendency to deafness and blindness.

2. The Time, Then, When an Infant Should Be Weaned.—This time must depend upon the strength of the child, and upon the health of the parent. Speaking generally, at the ninth month is the proper time. If the mother be delicate, it may be found necessary to wean the infant at six months; or if he be weak, or laboring under any disease, it may be well to continue nursing him for ten months; but after that time the breast will do him more harm than good, and will, moreover, injure the mother's health, and may, if she be so predisposed, excite disease.

3. Bad Results.—A child nursed beyond nine months is very apt, if he should live, to be knock-kneed, bow-legged, and weak-ankled—to be narrow-chested, and chicken-breasted—to be, in point of fact, a miserable little object. All the symptoms just enumerated are those of rickets, and rickets are damaging and defacing to “the human form divine.” Rickets is a very common complaint among children—nearly all arising from bad management—from hygienic rules not being either understood or followed.

4. The Manner in Which a Mother Should Act When She Weans Her Child.—She ought, as the word signifies, to do it gradually, that is to say, she should by degrees give him less and less of the breast, and more and more of artificial food; at length, she must only suckle him at night; and lastly, it would be well for the mother either to send him away or to leave him at home, and for a few days to go away herself.

5. How Weaning May Be Accomplished if Mother and Child Remain Together.—If the mother, during the day-time, cannot resist having her child in the room with her, then I should advise her to make a paste of aloes—that is to say, let her mix a little powdered aloes with a few drops of water, until it be of the consistence of paste—and let her smear a little of it on the nipple every time just before putting him to the breast; this will be quite enough for him; and one or two aloes-applications to the nipple will make him take a disgust to the bosom; and thus the weaning will be accomplished.

6. Drawing of the Bosoms.—The drawing of the bosoms during weaning, by means of a breast-pump, or by the mouth, or by other like contrivances, has frequently caused gathered breasts. This is a most reprehensible practice. If not drawn, the breasts scarcely, if ever, gather.

7. Live Abstemiously.—A mother ought during the period of weaning, to live abstemiously, and should drink

as little as possible. In many cases it is necessary to work off the milk, to give, every morning, for two or three mornings, mild laxative medicine, such as Seidlitz powder, or a teaspoonful of magnesia and a teaspoonful of Epsom salts in half a tumbler of warm water.

Symptoms Denoting Necessity of Weaning.

1. Signs and Symptoms.—A mother sometimes cannot suckle her child, the attempt bringing on a train of symptoms somewhat similar to the following: singing in the ears; dimness of sight; aching of the eyeballs; throbbing in the head; nervousness; hysterics; tremblings; faintings; loss of appetite and flesh; fluttering and palpitation of the heart; feelings of great exhaustion; indigestion; costiveness; sinking sensations of the stomach; pains in the left side; great weakness and dragging pains of the loins, which are usually increased whenever the infant is put to the bosom; pallor of the countenance; shortness of breath; swelling of the ankles.

2. Dangerous Consequences.—Remember, then, that if the above warning symptoms be disregarded, dangerous consequences, both to parent and child, may and probably will be the result. It may induce disease in the mother, as consumption, and, in consequence of the infant not being able to obtain sufficient or proper nourishment, it may cause him to dwindle and pine away, and eventually to die.

3. Great Diminution of Milk.—If there be, during any period of nursing, a sudden and great diminution of milk in the breasts, the chances are that the mother is again pregnant; if so, the child should be weaned at once. It is most injurious, both to parent and to child, for a mother to continue nursing when she is pregnant.

4. Warning.—Soon after nine months' nursing "the monthly periods" generally return. This is another warning that the babe ought immediately to be weaned. The milk will now lessen both in quantity and in nourishment, and the child in consequence will become delicate and puny, and, every day he is nursed, will be losing instead of gaining ground.

5. Predisposed to Consumption.—If a mother be predisposed to consumption; if she have had spitting of blood; if she be subject to violent palpitation of the heart; if she have any hereditary disease, as gout, skin affection, cancer; if she be laboring under great debility and extreme delicacy of constitution; if she have any of the above complaints or symptoms, she ought not on any account to nurse her child, but it should be brought up on artificial food or delegated to a wet-nurse,





A delicate child should never be put into the bath, but bathed on the lap and kept warmly covered.

HOW TO KEEP A BABY WELL.

1. The mother's milk is the natural food, and nothing can fully take its place.

2. The infant's stomach does not readily accommodate itself to changes in diet; therefore, regularity in quality, quantity and temperature is extremely necessary.

3. Not until a child is a year old should it be allowed any food except that of milk, and possibly a little cracker or bread, thoroughly soaked and softened.

4. Meat should never be given to very young children. The best artificial food is cream, reduced and sweetened with sugar and milk. No rule can be given for its reduction. Observation and experience must teach that, because every child's stomach is governed by a rule of its own.

5. A child can be safely weaned at one year of age, and sometimes less. It depends entirely upon the season, and upon the health of the child.

6. A child should never be weaned during the warm weather, in June, July or August.

7. When a child is weaned it may be given, in connection

with the milk diet, some such nourishment as broth, gruel, egg, or some prepared food.

8. A child should never be allowed to come to the table until two years of age.

9. A child should never eat much starchy food until four years old.

10. A child should have all the water it desires to drink, but it is decidedly the best to boil the water first, and allow it to cool. All the impurities and disease germs are thereby destroyed. This one thing alone will add greatly to the health and vigor of the child.

11. Where there is a tendency to bowel disorder, a little gum arabic, rice, or barley may be boiled with the drinking water.

12. If the child uses a bottle it should be kept absolutely clean. It is best to have two or three bottles, so that one will always be perfectly clean and fresh.

13. The nipple should be of black or pure rubber, and not of the white or vulcanized rubber. It should fit over the top of the bottle, no tubes should ever be used. It is impossible to keep them clean.

14. When the rubber becomes coated, a little coarse salt will clean it.

15. Babies should be fed at regular times. They should also be put to sleep at regular hours. Regularity is one of the best safeguards to health.

16. Milk for babies and children should be from healthy cows. Milk from different cows varies, and it is always better for a child to have milk from the same cow. A farrow cow's milk is preferable, especially if the child is not very strong.

17. Many of the prepared foods advertised for children are of little benefit. A few may be good, but what is good for one child may not be for another. So it must be simply a matter of experiment if any of the advertised foods are used.

18. It is a physiological fact that an infant is always healthier and better to sleep alone. It gets better air and is not liable to suffocation.

19. A healthy child should never be fed in less than two hours from the last time they finished before, gradually lengthening the time as it grows older. At 4 months $3\frac{1}{2}$ or 4 hours, at 5 months a healthy child will be better if given nothing in the night except, perhaps, a little water.

20. Give an infant a little water several times a day.

21. A delicate child the first year should be oiled after each bath. The oiling may often take the place of the bath, in case of a cold.

22. In oiling a babe, use pure olive oil, and wipe off thoroughly after each application. For nourishing a weak child use also olive oil.

23. For colds, coughs, croup, etc., use goose oil externally and give a teaspoonful at bed-time.

Bottle Feeding.

1. **The First Requisite.**—The first requisite for carrying out bottle feeding with thoroughness is that somebody should take charge of the child who has a special interest in it. Some person ought to be in special charge over the bottle, nipple and rubber tube. If a rubber tube is used, it should be kept thoroughly clean and never allowed to remain empty. Keep it submerged in water, and then carefully clean and cleanse it before using. The health of the child depends upon absolute cleanliness of the bottle and its attachments.

2. **One Bottle of Tainted Milk May be Fatal to an Infant,** and though a mother, or nurse, may day after day watch with the most zealous care the preparation of the baby's food, the souring of the milk, its mixture with contaminated water, the change of pasture of the cow may bring on an attack of diarrhœa or vomiting which may become uncontrollable.

3. **Fresh Milk.**—The fresher the milk, the more readily it will be digested; indeed, the warm milk just from the cow, is far more digestible than that which has been kept with every precaution for a few hours. There must be some change which milk undergoes, as it is noted by all observers that the milk when warm from the cow is but slightly acid, or neutral, but after it has stood for a while it always shows a very decided acid change. Mother's milk is always alkaline.

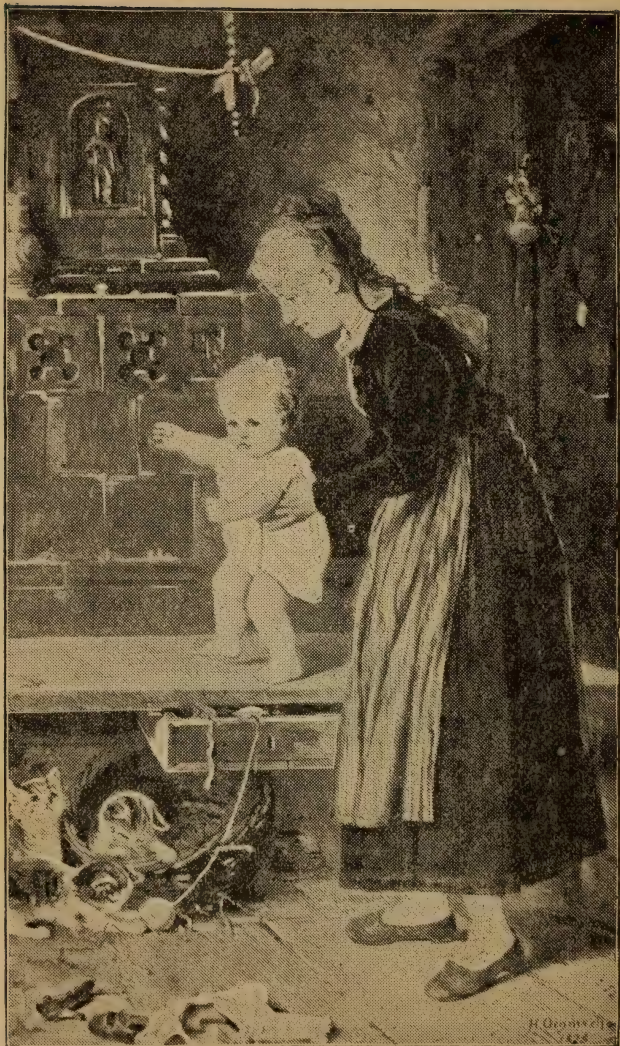
4. **Selection and Preservation of Milk.**—Great care should be taken in the selection of milk and in its preservation, even after it has reached the house, until used. If there is the slightest suspicion that the milk is not fresh, or that it has been subjected to much jolting, it should be boiled at once, and then put in a refrigerator to be warmed for each bottle. The boiling will destroy its ferments, and in that way diminish the chances for intestinal disturbances.—See sterilized milk in another portion of this book.

5. **Single Cow.**—The question of obtaining milk from a single cow is one that has been frequently insisted upon, and if one is satisfied that such milk is obtained and is found to have agreed with the child, it may have many advantages; but the ordinary mixed milk from a dairy of common cattle will be less liable to daily changes; it will maintain, as it were, an average of quality and condition. Not only should milk be pure and sweet, but it should be free from all matters that carry with them disease.

6. **A Pure Gum Nipple.**—Dr. W. Thornton Parker, of Newport, Rhode Island, recommends a pure gum nipple, with two holes as far apart as possible, as the best for the nursing bottle, and also says regarding the matter as follows: "When there is only one hole, the infant in nursing compresses the nipple and sends the milk in a stream in such a manner as often to nearly strangle itself. Milk coming through one hole is not as comfortable as when it comes through two, and the effort of nursing becomes disagreeable and wearisome to the little feeder. The best way to nurse an infant is by holding it in the arms, and give it the bottle in the same position and height as if it were really nursed by its mother. When it has finished nursing, the bottle should be removed, emptied and cleansed. Never should the bottle be left in the infant's care to use at will."

7. **A Mixture Resembling Mother's Milk.**—The milk from an ordinary dairy should be obtained as fresh as possible, mix together half a pint of this milk and half a pint of pure water, and to this should be added about two hundred grains or two heaping teaspoonfuls of milk sugar, with four grains of soda; it should then be brought to a boil, after which two tablespoonfuls of cream should be stirred in, and it is ready for use, to be given by bottle or drinking cup, at about the body temperature.





A Warning to Mothers.

THE DANGERS OF OVERFEEDING.

Many young children suffer from overfeeding. Mothers, eager for their babies to become fat, or fearful that their crying may be from hunger, unwittingly feed them too often.

A child of three months was recently brought to a physician, because it suffered from colic pains, diarrhœa and vomiting, and was poorly nourished. It appeared that the child had been fed as often as it would take food, which was sometimes as frequently as once an hour. A proper lengthening of the intervals between the feedings, under the physician's advice, was productive of good results. Similar cases are not uncommon.

A child of between six weeks and six months of age should not be fed oftener than once in three hours. From six months to ten months it should not be fed more than six times in the twenty-four hours, and at intervals of three hours during the day-time. At ten months, five times in the twenty-four hours is sufficient for healthy children.

The stomachs of most children who are too frequently fed become irritable and incapable of retaining food, while the milk fed in this way by the mother becomes so altered as to afford less nourishment than it should.

Other children too frequently fed will continue to digest and absorb the excess of food given them, and as a consequence will accumulate fat, sometimes showing the result of overfeeding merely in eczematous, or scaly, patches on the cheeks, or even the whole face and head.

When intestinal disorders result, as in the end they surely will, from too frequent feeding, the child will be really hungry; the surplus food acting as an irritant in the intestines is expelled before a sufficient amount for nourishment becomes absorbed. The child will then waste away, and if such treatment be persisted in—and if it survives—will surely become a victim to chronic intestinal disorders.

Mothers cannot be too deeply impressed with the importance of regular feeding at proper intervals.





HOW TO PRESERVE THE HEALTH AND LIFE OF YOUR INFANT DURING HOT WEATHER.

BATHING.

1. Bathe infants daily in tepid water and even twice a day in hot weather.

If delicate they should be sponged instead of immersing them in water, but cleanliness is absolutely necessary for the health of infants.

CLOTHING.

2. Put no bands in their clothing, but make all garments to hang loosely from the shoulders, and have all their clothing *scrupulously clean*, even the diaper should not be re-used without rinsing.

SLEEP ALONE.

3. The child should in all cases sleep by itself on a cot or in a crib and retire at a regular hour. A child *always* early taught to go to sleep without rocking or nursing is the healthier and happier for it. Begin *at birth* and this will be easily accomplished.

CORDIALS AND SOOTHING SYRUPS.

4. Never give cordials, soothing syrups, sleeping drops, etc., without the advice of a physician. A child that frets and does not sleep is either hungry or ill. *If ill it needs a physician.* Never give candy or cake to quiet a small child, they are sure to produce disorders of the stomach, diarrhœa or some other trouble.

FRESH AIR.

5. Children should have plenty of fresh air summer as well as winter. Avoid the severe hot sun and the heated kitchen for infants in summer. Heat is the great destroyer of infants. In excessive hot weather feed them with chips of ice occasionally, if you have it.

CLEAN HOUSES.

6. Keep your house clean and cool and well aired night and day. Your cellars cleared of all rubbish and whitewashed every spring, your drains cleaned with strong solution of copperas or chloride of lime, poured down them once a week. Keep your gutters and yards clean and insist upon your neighbors doing the same.

EVACUATIONS OF A CHILD.

The healthy motion varies from light orange yellow to greenish yellow, in number, two to four times daily. Smell should never be offensive. Slimy mucous-like jelly passages indicate worms. Pale green, offensive, acrid motions indicate disordered stomach. Dark green indicate acid secretions and a more serious trouble.

Fetid dark brown stools are present in chronic diarrhœa. Putty-like pasty passages are due to acidity curdling the milk or to torpid liver.



BREAST MILK.

7. Breast milk is the only proper food for infants, until after the second summer. If the supply is small keep what you have and feed the child in connection with it, for if the babe is ill this breast milk may be all that will save its life.

STERILIZED MILK.

8. Milk is the best food. Goat's milk best, cows milk next. If the child thrives on this *nothing else* should be given during the hot weather, until the front teeth are cut. Get fresh cow's milk twice a day if the child requires food in the night, pour it into a glass fruit jar with one-third pure water for a child under three months old, afterwards the proportion of water may be less and less, also a trifle of sugar may be added.

Then place the jar in a kettle or pan of cold water, like the bottom of an oatmeal kettle. Leave the cover of the jar loose. Place it on the stove and let the water come to a boil and boil ten minutes, screw down the cover tight and boil ten minutes more. then remove from the fire, and allow it to cool in the water slowly so as not to break the jar. When partly cool put on the ice or in a cool place. and keep tightly covered except when the milk is poured out for use. The glass jar must be kept perfectly clean and washed

and scalded carefully before use. A tablespoonful of lime water to a bottle of milk will aid in digestion. Discard the bottle as soon as possible and use a cup which you know is clean, whereas a bottle must be kept in water constantly when not in use, or the sour milk will make the child sick. Use no tube for it is exceedingly hard to keep it clean, and if pure milk cannot be had, condensed milk is admirable and does not need to be sterilized as the above.

DIET.

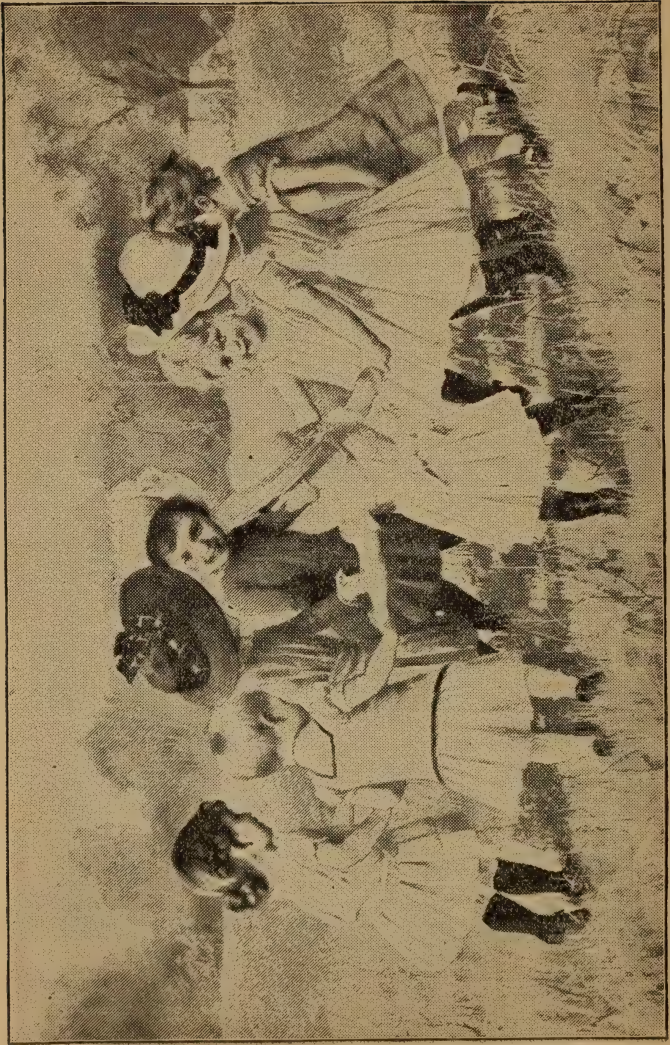
9. Never give babies under two years old such food as grown persons eat. Their chief diet should be milk, wheat bread and milk, oatmeal, possibly a little rare boiled egg, but always and chiefly milk. Germ wheat is also excellent.

EXERCISE.

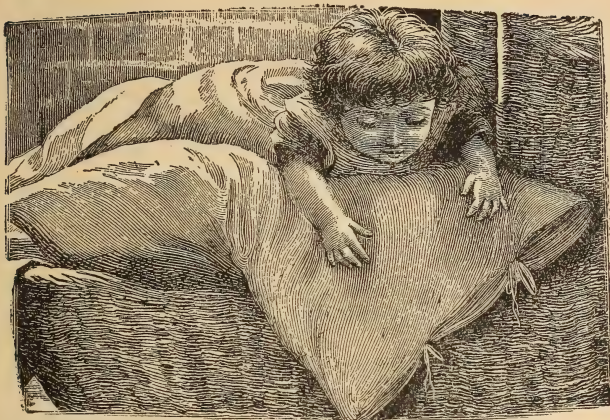


10. Children should have exercise in the house as well as outdoors, but should not be jolted and jumped and jarred in rough play, not rudely rocked in the cradle, nor carelessly trundled over bumps in their carriages. They should not be held too much in the arms, but allowed to crawl and kick upon the floor and develop their limbs and muscles. A child should not be lifted by its arms, nor dragged along by one hand after it learns to take a few feeble steps, but when they do learn to walk steadily it is the best of all exercise, especially in the open air.

Let the children as they grow older romp and play in the open air all they wish, girls as well as boys. Give the girls an even chance for health, while they are young at least, and don't mind about their complexion,



HEALTHY BABIES.



HOME TREATMENT FOR THE DISEASES OF INFANTS AND CHILDREN.

1. Out of the 984,000 persons that died during the year of 1890, 227,264 did not reach one year of age, and 400,647 died under five years of age.

What a fearful responsibility therefore rests upon the parents who permit these hundreds of thousands of children to die annually. This terrible mortality among children is undoubtedly largely the result of ignorance as regarding the proper care and treatment of sick children.

2. For very small children it is always best to use homœopathic remedies.

COLIC.

1. Babies often suffer severely with colic. It is not considered dangerous, but causes considerable suffering.

2. Severe colic is usually the result of derangement of the liver in the mother, or of her insufficient or improper nourishment and it occurs more frequently when the child is from two to five months old.

3. Let the mother eat chiefly barley, wheat and bread, rolled wheat, graham bread, fish, milk, eggs and fruit. The latter may be freely eaten, avoiding that which is very sour.

4. A rubber bag or bottle filled with hot water put into a crib will keep the child, once quieted, asleep for hours. If a child is suffering from colic, it should be thoroughly warmed and kept warm.

5. Avoid giving opiates of any kind, such as cordials, Mrs. Winslow's Soothing Syrup, "Mothers Friend," and various other patent medicines. They injure the stomach and health of the child, instead of benefiting it.

6. REMEDIES.—A few tablespoonfuls of hot water will often allay a severe attack of the colic. Catnip tea is also a good remedy.

A drop of essence of peppermint in 6 or 7 teaspoonfuls of hot water will give relief.

If the stools are green and the child is very restless, give chamomilla.

If the child is suffering from constipation, and undigested curds of milk appear in its fæces, and the child starts suddenly in its sleep, give nux vomica.

An injection of a few spoonfuls of hot water into the rectum with a little asafœtida, is an effective remedy, and will be good for an adult.

CONSTIPATION.

1. This is a very frequent ailment of infants. The first thing necessary is for the mother to regulate her diet.

2. If the child is nursed regularly and held out at the same time of each day, it will seldom be troubled with this complaint. Give plenty of *water*. Regularity of habit is the best remedy. If this method fails, use a soap suppository. Make it by paring a piece of white castile soap round. It should be made about the size of a lead pencil, pointed at the end.

3. Avoid giving a baby drugs. Let the physician administer them if necessary.

DIARRHŒA.

Great care should be exercised by parents in checking the diarrhœa of children. Many times serious diseases are brought on by parents being too hasty in checking this disorder of the bowels. It is an infant's first method of removing obstructions and overcoming derangements of the system.

SUMMER COMPLAINT.

1. Summer complaint is an irritation and inflammation of the lining membranes of the intestines. This may often be caused by teething, eating indigestible food, etc.

2. If the discharges are only frequent and yellow and not accompanied with pain, there is no cause for anxiety; but if the discharges are green, soon becoming gray, brown and sometimes frothy, having a mixture of phlegm, and sometimes containing food undigested, a physician had better be summoned.

3. In the first stages give a tablespoonful at bed-time of the following prescription:

2 oz. Castor Oil,

2 oz. Aromatic Syrup of Rhubarb.

1) *This is one of the best of domestic remedies*, and should always be kept on hand. Whenever the stomach of children is out of order, a dose of this simple remedy often works magic.

2) Keep the child perfectly quiet and the room well aired.

3) Put a drop of tincture of camphor on a teaspoonful of sugar, mix thoroughly; then add 6 teaspoonfuls of hot water and give a teaspoonful of the mixture every ten minutes. This is indicated where the discharges are watery, and where there is vomiting and coldness of the feet and hands. Chamomilla is also an excellent remedy.

4) Drink freely of boiled milk, and in bad cases drink no water except that which has been boiled and cooled.

FOR TEETHING.

If a child is suffering with swollen gums, is feverish, restless, and starts in sleep, give nux vomica.

WORMS.

PIN WORMS.

Pin worms and round worms are the most common in children. They are generally found in the lower bowels.

SYMPTOMS.—Restlessness, itching about the anus in the fore part of the evening, and worms in the fæces.

TREATMENT.—Give with a syringe an injection of a tablespoonful of linseed oil. Cleanliness is also very necessary.

ROUND WORMS.

A round worm is from six to sixteen inches in length, resembling the common earth worm. It inhabits generally the small intestines, but it sometimes enters the stomach and is thrown up by vomiting.

SYMPTOMS.—Distress, indigestion, swelling of the abdomen, grinding of the teeth, restlessness, and sometimes convulsions.

TREATMENT.—One teaspoonful of powdered wormseed mixed with a sufficient quantity of molasses, or spread on bread and butter.

Or, one grain of santonine every four hours for two or three days, followed by a brisk cathartic. Wormwood tea is also highly recommended.

SWAIM'S VERMIFUGE.

2 ounces wormseed,
1½ ounces valerian,
1½ ounces rhubarb,
1½ ounces pink-root,
1½ ounces white agaric.

Boil in sufficient water to yield 3 quarts of decoction. and add to it 30 drops of oil of tansy and 45 drops of oil of cloves, dissolved in a quart of rectified spirits. Dose, 1 teaspoonful at night.

ANOTHER EXCELLENT VERMIFUGE.

Oil of wormseed, 1 ounce,
Oil of anise, 1 ounce,
Castor oil, 1 ounce,
Tinct. of myrrh, 2 drops,
Oil of turpentine, 10 drops.

Mix thoroughly.

Always shake well before using.

Give 10 to 15 drops in cold coffee, once or twice a day.



HOW TO TREAT CROUP.

SPASMODIC AND TRUE.

SPASMODIC CROUP.

DEFINITION.—A spasmodic closure of the glottis which interferes with respiration. Comes on suddenly and usually at night, without much warning. It is a purely nervous disease and may be caused by reflex nervous irritation from undigested food in the stomach or bowels, irritation of the gums in dentition, or from brain disorders.

SYMPTOMS.—Child awakens suddenly at night with suspended respiration or very difficult breathing. After a few respirations it cries out and then falls asleep quietly, or the attack may last an hour or so, when the face will become pale, veins in the neck become turgid and feet and hands contract spasmodically. In mild cases the attacks will only occur once during the night, but may recur on the following night.

HOME TREATMENT.—During the paroxysm dashing cold water in the face is a common remedy. To terminate the spasm and prevent its return give teaspoonful doses of pow-

dered alum. The syrup of squills is an old and tried remedy; give in 15 to 30 drop doses and repeat every 10 minutes till vomiting occurs. Seek out the cause if possible and remove it. It commonly lies in some derangement of the digestive organs.

TRUE CROUP.

DEFINITION.—This disease consists of an inflammation of the mucous membrane of the upper air passages, particularly of the larynx with the formation of a false membrane that obstructs the breathing. The disease is most common in children between the ages of two and seven years, but it may occur at any age.

SYMPTOMS.—Usually there are symptoms of a cold for three or four days previous to the attack. Marked hoarseness is observed in the evening with a ringing metallic cough and some difficulty in breathing, which increases and becomes somewhat paroxysmal till the face which was at first flushed becomes pallid and ashy in hue. The efforts at breathing become very great, and unless the child gets speedy relief it will die of suffocation.

HOME TREATMENT.—Patient should be kept in a moist warm atmosphere, and cold water applied to the neck early in the attack. As soon as the breathing seems difficult give a half to one teaspoonful of powdered alum in honey to produce vomiting and apply the remedies suggested in the treatment, of diphtheria, as the two diseases are thought by many to be identical. When the breathing becomes labored and face becomes pallid, the condition is very serious and a physician should be called without delay.

SCARLET FEVER.

DEFINITION.—An eruptive contagious disease, brought about by direct exposure to those having the disease, or by contact with clothing, dishes, or other articles, used about the sick room.

The clothing may be disinfected by heating to a temperature of 230° Fahrenheit or by dipping in boiling water before washing.

Dogs and cats will also carry the disease and should be kept from the house, and particularly from the sick room.

SYMPTOMS.—Chilly sensations or a decided chill, fever, headache, furred tongue, vomiting, sore throat, rapid pulse, hot dry skin and more or less stupor. In from 6 to 18 hours a fine red rash appears about the ears, neck and shoulders, which rapidly spreads to the entire surface of the body. After a few days, a scurf or branny scales will begin to form on the skin. These scales are the principal source of contagion.

HOME TREATMENT.

1. Isolate the patient from other members of the family to prevent the spread of the disease.

2. Keep the patient in bed and give a fluid diet of milk gruel, beef tea, etc., with plenty of cold water to drink.

3. Control the fever by sponging the body with tepid water, and relieve the pain in the throat by cold compresses, applied externally.

4. As soon as the skin shows a tendency to become scaly, apply goose grease or clean lard with a little boracic acid powder dusted in it, or better, perhaps, carbolized vaseline to relieve the itching and prevent the scales from being scattered about, and subjecting others to the contagion.

REGULAR TREATMENT.—A few drops of aconite every three hours to regulate the pulse, and if the skin be pale and circulation feeble, with tardy eruption, administer one to ten drops of tincture of belladonna, according to the age of the patient. At the end of third week, if eyes look puffy and feet swell, there is danger of Acute Bright's disease, and a physician should be consulted. If the case does not progress well under the home remedies suggested, a physician should be called at once.

WHOOPIING COUGH.

DEFINITION.—This is a contagious disease which is known by a peculiar whooping sound in the cough. Considerable mucus is thrown off after each attack of spasmodic coughing.

SYMPTOMS.—It usually commences with the symptoms of a common cold in the head, some chilliness, feverishness, rest-

lessness, headache, a feeling of tightness across the chest, violent paroxysms of coughing, sometimes almost threatening suffocation, and accompanied with vomiting.

HOME TREATMENT.—Patient should eat plain food and avoid cold drafts and damp air, but keep in the open air as much as possible. A strong tea made of the tops of red clover is highly recommended. A strong tea made of chestnut leaves, sweetened with sugar, is also very good.

1 teaspoonful of powdered alum,
1 teaspoonful of syrup.

Mix in a tumbler of water, and give the child one teaspoonful every two or three hours. A kerosene lamp kept burning in the bed chamber at night is said to lessen the cough and shorten the course of the disease.

MUMPS.

DEFINITION.—This is a contagious disease causing the inflammation of the salivary glands, and is generally a disease of childhood and youth.

SYMPTOMS.—A slight fever, stiffness of the neck and lower jaw, swelling and soreness of the gland. It usually develops in four or five days and then begins to disappear.

HOME TREATMENT.—Apply to the swelling a hot poultice of cornmeal and bread and milk. A hop poultice is also excellent. Take a good dose of physic and rest carefully. A warm general bath, or mustard foot-bath, is very good. Avoid exposure or cold drafts. If a bad cold is taken, serious results may follow.

MEASLES.

DEFINITION.—It is an eruptive, contagious disease, preceded by cough and other catarrhal symptoms for about four or five days. The eruption comes rapidly in small red spots, which are slightly raised.

SYMPTOMS.—A feeling of weakness, loss of appetite, some fever, cold in the head, frequent sneezing, watery eyes, dry cough and a hot skin. The disease takes effect nine or ten days after exposure.

HOME TREATMENT.—Measles is not a dangerous disease in the child, but in an adult it is often very serious. In childhood very little medicine is necessary, but exposure must be carefully avoided and the patient kept in bed in a moderately warm room. The diet should be light and nourishing. Keep the room dark. If the eruption does not come out promptly, apply hot baths.

COMMON TREATMENT.—Two teaspoonfuls of spirits of nitre, one teaspoonful paregoric, one wineglassful of camphor water. Mix thoroughly, and give a teaspoonful in half a teacupful of water every two hours. To relieve the cough, if troublesome, flaxseed tea or infusion of slippery-elm bark with a little lemon juice to render more palatable, will be of benefit.

CHICKEN POX.

DEFINITION.—This is a contagious, eruptive disease which resembles to some extent small pox. The pointed vesicles or pimples have a depression in the center in chicken pox, and in small pox they do not.

SYMPTOMS.—Nine to seventeen days elapse after the exposure, before symptoms appear. Slight fever, a sense of sickness, the appearance of scattered pimples, some itching and heat. The pimples rapidly change into little blisters filled with a watery fluid. After five or six days they disappear.

HOME TREATMENT.—Milk diet and avoid all kinds of meat. Keep the bowels open and avoid all exposure to cold. Large vesicles on the face should be punctured early and irritation by rubbing should be avoided.

HOME TREATMENT OF DIPHTHERIA.

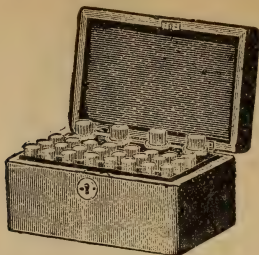
DEFINITION.—Acute, specific, constitutional disease with local manifestations in the throat, mouth, nose, larynx, wind-pipe, and glands of the neck. The disease is infectious, but not very contagious under the proper precautions. It is a disease of childhood, though adults sometimes contract it. Many of the best physicians of the day consider True or Membranous Croup to be due to this diphtheritic membranous disease thus located in the larynx or trachea.

SYMPTOMS.—Symptoms vary according to the severity of the attack. Chills, fever, headache, languor, loss of appetite, stiffness of neck, with tenderness about the angles of the jaw, soreness of the throat, pain in the ear, aching of the limbs, loss of strength, coated tongue, swelling of the neck, and offensive breath; lymphatic glands on side of neck enlarged and tender. The throat is first to be seen red and swollen, then covered with grayish white patches, which spread, and a false membrane is found on the mucous membrane. If the nose is attacked, there will be an offensive discharge and the child will breathe through the mouth. If the larynx or throat are involved, the voice will become hoarse, and a croupy cough with difficult breathing shows that the air passage to the lungs is being obstructed by the false membrane.

HOME TREATMENT.—Isolate the patient to prevent the spread of the disease. Diet should be of the most nutritious character, as milk, eggs, broths, and oysters. Give at intervals of every two or three hours. If patient refuses to swallow from the pain caused by the effort, a nutrition injection must be resorted to. Inhalations of steam and hot water, and allowing the patient to suck pellets of ice, will give relief. Sponges dipped in hot water and applied to the angles of the jaw are beneficial. Inhalations of lime, made by slaking freshly burnt lime in a vessel and directing the vapor to the child's mouth by means of a newspaper or similar contrivance. Flower of sulphur blown into the back of the mouth and throat by means of a goose quill has been highly recommended. Frequent gargling of the throat and mouth with a solution of lactic acid, strong enough to taste sour, will help to keep the parts clean and correct the foul breath. If there is great prostration, with the nasal passage affected, or hoarseness and difficult breathing, a physician should be called at once.



A WELL CARED-FOR BABY.



How to Use All Kinds of Homœopathic Remedies FOR ALL DISEASES.

AGUE.

In the first stages of fever give Baptisia and Aconite alternately, then use Chinin. Arsen. 3X.

LOSS OF APPETITE.

Take Nux Vomica and Pulsatilla ; if there is any constipation with derangement of the stomach, Podophyllin ; if with debility, China.

ASTHMA.

Take Arsenicum and Ipecac ; if it is a nervous attack use Gelsemium.

BILIOUS ATTACKS.

Take Chamomilla and Nux Vomica alternately ; if with constipation, Podophyllin.

BOILS.

When large-looking, like carbuncle, Arsen., Belladonna. When there is a disposition toward boils, give Lycopodium, Sulphur and Silicea, twice a week.

BRONCHITIS.

Take Aconite and Bryonia alternately for acute bronchitis ; for chronic bronchitis, Bryonia and Phosphorus alternately.

BURNS OR CHILBLAINS,

however bad, may find instant relief, and sure cure in Halsey Bro's. Burn and Frost Liniment.

CATARRH OR COLD IN THE HEAD.

Take Aconite and Nux Vomica alternately ; if there is watery discharge from the nose, Arsenicum and Bryonia alternately ; if with cold in the chest, Bryonia and Aconite alternately, or Chamomilla with Hepar Sulphur alternately ; if with hoarseness, take Phosphorus.

COUGH.

If a dry cough, take Ipecac and Bryonia alternately ; hoarse cough, Hepar Sulphur and Phosphorus alternately ; loose cough, Pulsatilla and Tartar Emetic alternately.

FLATULENT COLIC.

Take Colocynthis and Pulsatilla alternately every ten minutes ; when better every hour or two.

CHOLERA MORBUS, CHOLERA.

Use Veratrum, Ipecac, Colocynth.

COSTIVENESS.

Take Nux Vomica and Sulphur alternately every night and morning.

COLD IN CHEST.

If with dry, hard cough, take Aconite and Bryonia alternately ; if the cough is loose and rattling, take Ipecac alternately with Tartar Emetic ; if with hoarseness, Phosphorus.

CROUP.

Aconite, Spongia and Hepar Sulphur in rotation, fifteen minutes apart ; when better, every two hours.

CONSTIPATION.

Nux Vomica alternately with Bryonia.

CUTS AND LACERATED WOUNDS

should be treated with Tincture of Calendula. It works magically in healing rapidly and removing inflammation.

CONVULSIONS.

Belladonna and Hyoscyamus alternately, first using hot water bath.

DIARRHŒA.

Bilious — Chamomilla or Mercurius ; simple diarrhœa, China, alternately with Mercurius ; painful diarrhœa, Arsenicum and Veratrum alternately. A dose after every stool.

DIPHTHERIA.

Belladonna used alternately with Merc. Iod. Where there is croup complication, Kali Bich., and gargle or touch white spots with Alcohol Dilute.

DISEASES OF INFANTS.

Colic and diarrhœa, with vomiting, Ipecac ; obstruction of the nose, with running from the nose, Chamomilla ; dry obstructions of the nose, Nux Vomica ; constipation, Bryonia and Nux Vom. alternately ; sleeplessness, Coffea ; fever, with dry skin, Aconite ; difficult teething, Calcarea Carb. The pellets may be mashed with the fingers before placing on the child's tongue.

DYSENTERY.

Use Aconite and Mercurius Cor. alternately, a dose after every stool.

DYSPEPSIA.

Pulsatilla and Chamomilla alternately

EARACHE.

Pulsatilla, Belladonna and Mercurius in rotation every fifteen minutes until better. Use hot water applications.

FACEACHE OR NEURALGIA.

Aconite, Chamomilla and Belladonna in rotation every fifteen minutes ; when better, every three hours ; if not better in a day or so, take Aconite and Mercurius in rotation.

ERYSIPELAS.

Belladonna if with red, smooth skin ; if with blisters or vesicles, Rhus Tox.

THE EYE.

In inflammation use Aconite, Belladonna and Gelsemium, in rotation.

FEVER.

Aconite every half hour. Scarlet fever, Aconite and Belladonna alternately ; rheumatic fever, Aconite, Bryonia and Rhus Tox in rotation ; fever in infants, Aconite and Chamomilla ; chills and fever, use Arsenicum, Ipecac and China in rotation.

HEARTBURN.

Nux Vomica in alternation with Pulsatilla.

HEADACHE.

Nervous Headache, Belladonna and Bryonia alternately every fifteen minutes ; sick-headache, Nux Vomica and Bryonia alternately every half hour ; congestive headache, throbbing, Belladonna every fifteen minutes ; headache of females, Pulsatilla.

HEART DISEASE.

Aconite, Gelsemium and Digitals.

HOARSENESS.

Aconite alternately with Hepar Sulphur. If these fail, take Mercurius and Phosphorus alternately.

IMPURE BLOOD.

Hepar Sulphur and Sulphur alternately.

ITCH.

Take Hepar sulphur, also apply powdered Sulphur and lard externally.

INFLUENZA AND LA GRIPPE.

Arsenicum and Mercurius alternately.

KIDNEY TROUBLES.

Aconite and Bryonia alternately.

INACTIVE LIVER.

Alternate Merc. Sol. and Podophyllin.

LUMBAGO,

or pain in small of the back. Take Rhus Tox., Nux Vomica and Bryonia in rotation.

LEUCORRHŒA.

Sepia, Cimifuciuga and Caullophyllum.

MEASLES.

Aconite and Pulsatilla alternately. If the rash disappears take Sulphur. If it hesitates to disappear, use Gelsemium and Ipecac alternately.

MORNING SICKNESS.

Use Macrotin 3X in alternation with Nux Vomica.

MUMPS.

Take Mercurius and Belladonna alternately, or China and Phosphorus alternately.

NEURALGIA.

Aconite, Belladonna and Bryonia are prominent remedies.

NERVOUS DEBILITY.

Take China and Phosphorus alternately, four hours apart.

NOSEBLEED.

Take Belladonna, in females Pulsatilla.

PILES.

Gelsemium and Nux Vomica alternately, a dose every two hours ; in chronic piles use Nux Vomica and Sulphur alternately, a dose every night and morning.

PLEURISY.

Give Aconite alternate with Bryonia. Put hot water bags to feet and hands, and drink hot water.

RHEUMATISM.

Aconite, Bryonia and Rhus Tox in rotation.

RINGWORM.

Rhus Tox and Sulphur alternately.

STINGS OF INSECTS.

Apply a piece of raw onion, or saleratus and water.

SORE THROAT.

Belladonna alternately with Mercurius. For quinsy take the above two in rotation with Hepar Sulph.

TOOTHACHE.

Aconite, Chamomilla and Mercurius in rotation every half hour.

URINARY DIFFICULTIES.

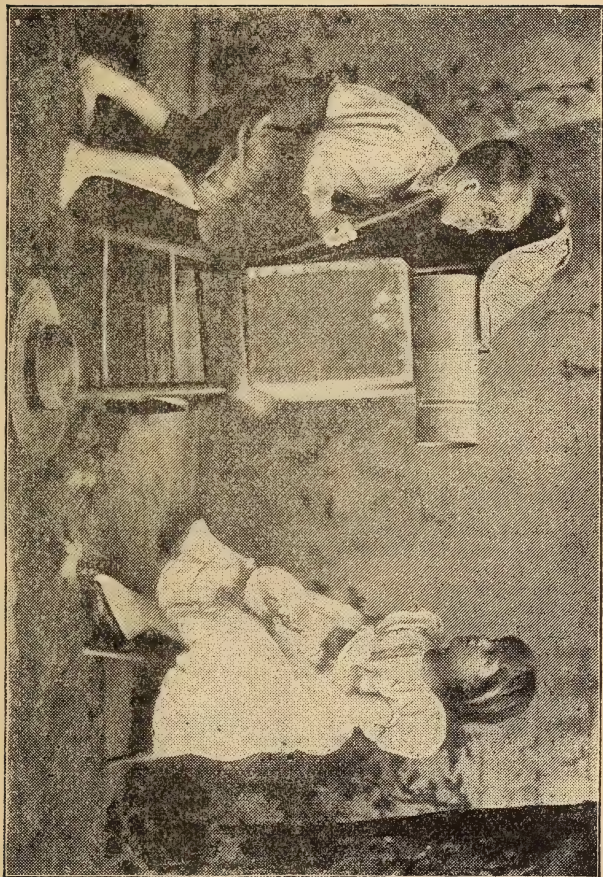
Where discharge is burning and scanty, Cantharis ; where there is over-secretion and inflammation of bladder, Apis Mel. alternate with Copaiva ; where difficult from taking cold or with fever, Aconite.

WHOOPIING COUGH.

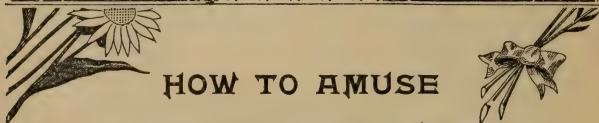
Belladonna, Ipecac and Hepar Sulphur in rotation.

WORMS.

Cina for pin or seat worms, or Santonine 2X Powder.



THE YOUNG PHOTOGRAPHER.



HOW TO AMUSE LITTLE CHILDREN.

A busy child is always happy, and whoever possesses the faculty to keep a child busy has a great advantage in a household.

We will enumerate some very simple methods for amusing small children: A block of wood, a saucerful of tacks, and a

small tack hammer will give a child more amusement than almost anything that can be devised. It may make a little noise in the house, but it will amuse the child for a long time every day. A pair of blunt pointed scissors, with plenty of newspaper pictures, or other pictures, to cut out, will give amusement of which children rarely ever tire. A cheap box of paints for coloring the pictures is an excellent diversion and a good practice.

Little ones find great pleasure in stringing buttons, and they can soon learn to make ornamental work by sewing them on cloth in simple designs.

Little girls are always delighted with a doll, but many parents make mistakes by not teaching them to dress and undress the dolls, and make jackets, dresses, etc., for them. For little children a heap of clean sand will afford an unending source of amusement. Children will dig it over and over again, mold it in all sorts of shapes and forms, and seemingly never tire of it. The older children will extract pleasure from it also.

Empty spools, both large and small, can be utilized to form many a little toy carriage, engine, and the like. A nice set of blocks, home made or purchased, affords one of the best amusements for children. In order to give the best results there should be from twenty-five to fifty blocks, different forms are preferable.

The simplest toys will generally afford as much amusement as expensive ones, and in the homes where money can purchase every conceivable luxury there is probably no more happiness among the children than in the humblest homes of the poor, if the parents will but utilize what facilities they have in preparing playthings for their children.



**Teach your children to play with a design or purpose.
Have them always make or construct something.**



How to make Children Healthy, Vigorous, and Beautiful.

1. The physical conditions and developments of the child should be as carefully watched as its health, for the beauty, strength and health of a child depends largely upon the care and instruction of the parents.

2. Hereditary tendencies to disease must be carefully considered. If there is heart disease, consumption, or other constitutional diseases in the family, the children should be taught early to take regular and vigorous exercise every day, and as much of it out doors as the weather and circumstances will permit. There is nothing that overcomes hereditary disease in children so successfully as vigorous exercise and well ventilated sleeping rooms.

3. Give the children nourishing food, and until six years of age they should live mostly upon a milk diet.

4. From the earliest infancy, children must have an ample supply of pure air. Keep the bed-room well ventilated.

5. Never let children younger than fifteen years of age wear stays of any kind. During childhood the bones yield easily to pressure, and very many injuries and deformities have their beginning by bad methods of dress, and all forms of artificial bandages, corsets, garters, waist-strings, or an excess of weight hanging from the hips, should be avoided. All garments made for children should hang from the shoulders.

6. Children who play out-of-doors in cool and damp weather should wear good heavy shoes with thick soles.

7. It is an excellent practice for families to secure a good text-book on gymnastic or calisthenic exercise, and when children are five years of age to begin and give them a regular systematic training every day. This will develop their muscular strength, give grace to their figures and gestures, develop their lungs, and strengthen the constitution in general. Both girls and boys should be trained by taking regular physical exercise daily, or taught to perform some daily task, which will answer the same purpose.

8. Indulge children in all kinds of out-door games, croquet, lawn tennis, etc., and your children will enjoy happiness and health.

9. Be sure and give children plenty of sleep. They should retire early and not be disturbed in the morning, but be permitted to enjoy their full desire of sleep.

10. Children should never drink coffee, tea, cocoa, or chocolate, for it will make the skin thick and yellow and often produce other serious disorders. Milk and water should be the only drink of children.

11. Little girls playing out-of-doors should have their faces protected, as they are liable to become freckled, and freckles are sometimes very difficult to remove. They should wear good large sun-bonnets or broad-brimmed hats.

12. Don't be afraid if your children scream and shout in their play, and think them boisterous. Let them develop their lungs.



LITTLE MISCHIEF.

The Inhumanities of Parents.

1. Not long ago a Presbyterian minister in Western New York whipped his three-year-old boy to death, for refusing to say his prayers. The little fingers were broken ; the tender flesh was bruised and actually mangled ; strong men wept when they looked on the lifeless body. Think of a strong man from one hundred and fifty to two hundred pounds in weight, pouncing upon a little child, like a Tiger upon a Lamb, and with his strong arm inflicting physical blows on the delicate tissues of a child's body. See its frail and trembling flesh quiver and its tender nervous organization shaking with terror and fear.

2. How often is this the case in the punishment of children all over this broad land ! Death is not often the immediate consequence of this brutality as in the above stated case, but the punishment is often as unjust, and the physical constitution of children is often ruined and the mind by fright seriously injured.

3. Everyone knows the sudden sense of pain, and sometimes dizziness and nausea follow, as the results of an accidental hitting of the ankle, knee or elbow against a hard substance, and involuntary tears are brought to the eyes ; but what is such a pain as this compared with the pains of a dozen or more quick blows on the body of a little helpless child from the strong arm of a parent in a passion ? Add to this overwhelming terror of fright, the strangulating effects of sighing and shrieking, and you have a complete picture of child-torture.

4. Who has not often seen a child receive, within an hour or two of the first whipping, a second one, for some small ebullition of nervous irritability, which was simply inevitable from its spent and worn condition ?

5. Would not all mankind cry out at the inhumanity of one who, as things are to-day, should propose the substitution of pricking or cutting or burning for whipping ? It would, however, be easy to show that small jabs or pricks or cuts are more human than the blows many children receive. Why may not lying be as legitimately cured by blisters made with hot coal as by black and blue spots made with a ruler or whip ? The principle is the same ; and if the principle is right, why not multiply methods ?

6. How many loving mothers will, without any thought of cruelty, inflict half a dozen quick blows on the little hand of her child, and when she could no more, take a pin and make

the same number of thrusts into the tender flesh, than she could bind the baby on a rack. Yet the pin-thrust would hurt far less, and would probably make a deeper impression on the child's mind.



7. We do not intend to be understood that a child must have everything that it desires and every whim and wish to receive special recognition by the parents. Children can soon be made to understand the necessity of obedience, and punishment can easily be brought about by teaching them self-denial. Deny them the use of a certain plaything, deny

them the privilege of visiting certain of their little friends, deny them the privilege of the table, etc., and these self-denials can be applied according to the age and condition of the child, with firmness and without any yielding. Children will soon learn obedience if they see the parents are sincere. Lessons of home government can be learned by the children at home as well as they can learn lessons at school.

8. The trouble is, many parents need more government, more training and more discipline than the little ones under their control.

9. Scores of times during the day a child is told in a short authoritative way, to do or not to do certain little things, which we ask at the hands of elder persons as favors. When we speak to an elder person, we say, would you be so kind as to close the door, when the same person making the request of a child, will say, "*Shut the door.*" "*Bring me the chair.*" "*Stop that noise.*" "*Sit down there.*" Whereas, if the same kindness was used towards the child it would soon learn to imitate the example.

10. On the other hand, let a child ask for anything without saying "please," receive anything without saying "thank you," it suffers a rebuke and a look of scorn at once. Often a child insists on having a book, chair or apple to the inconveniencing of an elder, and what an outcry is raised: "Such rudeness;" "Such an ill-mannered child;" "His parents must have neglected him strangely." Not at all: The parents may have been steadily telling him a great many times every day not to do these precise things which you dislike. But they themselves have been all the time doing those very things before him, and there is no proverb that strikes a truer balance between two things than the old one which weighs example over against precept.

11. It is a bad policy to be rude to children. A child will win and be won, and in a long run the chances are that the child will have better manners than its parents. Give them a good example and take pains in teaching them lessons of obedience and propriety, and there will be little difficulty in raising a family of beautiful and well-behaved children.

12. Never correct a child in the presence of others, it is a rudeness to the child that will soon destroy its self-respect. It is the way criminals are made and should always and everywhere be condemned.

13. But there are no words to say what we are or what we deserve, if we do this to the little children whom we

have dared for our own pleasure to bring into the perils of this life, and whose whole future may be blighted by the mistakes of our careless hands. There are thousands of young men and women to-day groaning under the penalties and burdens of life, who owe their misfortunes, their shipwreck and ruin to the ignorance or indifference of parents.

14. Parents of course love their children, but with that love there is a responsibility that cannot be shirked. The government and training of children is a study that demands a parent's time and attention often much more than the claims of business.

15. Parents, study the problems that come up every day in your home. Remember, your future happiness, and the future welfare of your children, depend upon it.

16. **Criminals and Heredity.**—Wm. M. F. Round was for many years in charge of the House of Refuge on Randall's Island, New York, and his opportunities for observation in the work among criminals surely make him a competent judge, and he says in his letter to the New York Observer: "Among this large number of young offenders I can state with entire confidence that not one per cent. were children born of criminal parents; and with equal confidence I am able to say that the common cause of their delinquency was found in bad parental training, in bad companionship, and in lack of wholesome restraint from evil associations and influences. It was this knowledge that led to the establishing of the House of Refuge nearly three-quarters of a century ago."

17. **Bad Training.**—Thus it is seen from one of the best authorities in the United States that criminals are made either by the indifference or the neglect of parents, or both, or by too much training without proper judgment and knowledge. Give your children a good example, and never tell a child to do something and then become indifferent as to whether they do it or not. A child should never be told twice to do the same thing. Teach the child in childhood obedience and never vary from that rule. Do it kindly but firmly.

18. **If Your Children Do Not Obey or Respect You** in their childhood and youth, how can you expect to govern them when older and shape their character for future usefulness and good citizenship?

19. **The Fundamental Rule.**—Never tell a child twice to do the same thing. Command the respect of your children, and there will be no question as to obedience.



INNOCENT SLEEP.



"Why tinge the cheek of youth? the snowy neck,
Why load with jewels? why anoint the hair?
Oh, lady, scorn these arts; but richly deck
Thy soul with virtues: thus for love prepare!
Lo, with what vermil tints the apple blooms.
Say, does the rose the painter's hand require?
Away, then, with cosmetics and perfumes.
The charms of nature most excite desire."

How to Obtain and Preserve a Beautiful Complexion.

1. The great secret in acquiring a bright, beautiful skin, is temperance, exercise and cleanliness.
2. High living and late hours will destroy the most beautiful complexion.
3. Those who desire to be beautiful should never drink strong coffee, nor eat warm bread and butter, fat meat, etc.

174 *How to Obtain and Preserve a Beautiful Complexion.*

4. Moderate diet and frequent bathing will insure a healthy and a beautiful face.

5. If you desire your skin to be perfectly clean and white, bathe it in warm water and bran, adding a few drops of bay rum.

6. To keep the skin and face perfectly soft, take the whites of four eggs boiled in rose water, one-half ounce of alum, and one-half ounce of sweet almonds; beat the whole together till it assumes the consistency of paste. Spread this on a cloth and wear it on the face during the night.

7. Another good preparation to produce a soft and beautiful skin is, to take a small piece of the gum of benzoin and boil it in spirits of wine till it becomes a rich tincture. Fifteen drops of this, poured into a glass of water, will produce a mixture which will look like milk, and it also has an agreeable perfume. This will give the face a rich flesh color.

8. A lady who possesses a beautiful face should preserve it by wearing a veil or other covering on going into the open air or sunlight.

9. Do not use strong cosmetics, paints or pastes for adorning the face. They will ruin the best and most beautiful complexion in the world.

10. To powder and paint the cheek of beauty, is a ridiculous and culpable practice. There are many good remedies to produce a good healthy and natural complexion; that is all that is necessary. There is no such beauty as a rosy cheek which nature paints.

A Cure for Sunburn.

This may occur in grade from a slight reddening of the face to an inflammation attended with blistering. Use soothing applications and avoid the sun until well.

How to Develop the Chest and Bust.

The best treatment is gentle rubbing. Great care must be exercised that no chafing or bruising is produced. This gentle friction night and morning, five minutes at a time, will generally produce the desired results. A little linseed oil and rose water may be applied with good effect. Take at the same time, three times a day, small doses of cod-liver oil.



HEALTH AND BEAUTY.

TO REMOVE PIMPLES.

Many pimples are removed by simply washing the face several times a day with warm water.

Sulphur water, 1 oz. White wine vinegar, 2 oz.

Liquor of potassa, $\frac{1}{4}$ oz. Distilled water, 2 oz.

Acetated liquor of ammonia, $\frac{1}{4}$ oz.

Apply twice a day.

To Remove Black Specks or "Fleshworms."

Wash, and rub thoroughly with a towel and then apply the following twice a day :

White brandy, 4 oz.

Cologne, 2 oz.

Liquor of potassa, 1 oz.

To Remove Yellow Spots.

Rubbing the face with common sulphur, will often cure the worst forms. If not, apply the following safe remedy :

Strong sulphur water, 1 oz.

Lemon juice, $\frac{1}{4}$ oz.

Cinnamon water, 1 drachm.

To Remove and Prevent Wrinkles.

Put some powder of best myrrh upon an iron plate, sufficiently heated to melt the gum gently, and when it liquifies, cover your head with a napkin, and hold your face over the myrrh at a proper distance to receive the fumes without inconvenience.

How to Produce Beautiful Eyebrows and Lashes.

The Circassian type of beauty is considered the finest. A preparation to promote the growth of the brows and lashes is made of the following ingredients :

Olive oil, $\frac{1}{2}$ ounce,

Oil of nutmeg, 12 drops,

Oil of rosemary, 12 drops,

Tincture of cantharides, 3 drachms.

Pearl Water for the Complexion.

1 lb. castile soap,

1 gal. water.

Dissolve, then add alcohol, one quart ; oil of rosemary and oil of lavender, each 2 drachms. Mix well.

How to Remove Freckles.

They are always developed on the parts of the body most exposed to the sun, and on some persons disappear in winter. They seldom appear on children before the age of five, and usually disappear in old age.

REMEDY: 4 ounces of rose water,
40 grains of borax,
 $\frac{1}{4}$ ounce of dilute acetic acid,
6 grains of corrosive sublimate.

Apply with a soft brush or rag every morning and evening, and continue until the freckles disappear.

Caution. Avoid the sun as much as possible during the treatment. Avoid all blistering compounds.

Another Remedy for Freckles.

Sulpho-carbonate of zinc, 1 ounce,
Glycerine, 12 ounces,
Rose water, 12 ounces,
Alcohol, 3 ounces,
Spirit of neroli, $\frac{1}{2}$ drachm.

Mix them. To be applied twice a day, leaving on from half an hour to one hour ; then wash off and protect the face with a veil on exposure to strong light.

How to Cure Blackheads.

Blackheads are not worms as many suppose. They consist of the hardening of the oil in the glands of the skin, and the dust collecting and adhering to the surface gives them a black appearance.

REMEDY. Press them out with a hollow key or with the thumb and fingers, and apply a mixture of sulphur and cream every evening. Wash every morning with the best toilet soap, or wash the face with hot water with a soft flannel at bedtime.

How to Remove Tan.

Lemon juice, $\frac{1}{2}$ ounce,
New milk, $\frac{1}{2}$ pint,
Brandy, $\frac{1}{2}$ ounce.

Mix, and boil and skim off the skum. Apply every night and morning. Or, take a lemon, cut it in two, and rub it over the face. Wash it off and apply magnesia moistened in water and let it dry on the face. When dry, wash it off. Repeat this three or four times successively.



NATURAL BEAUTY.



Sensible Helps to Beauty.

1. **FOR SCRAWNY NECK.**—Take off your tight collars, feather boas and such heating things. Wash neck and chest with hot water, then rub in sweet oil all that you can work in. Apply this every night before you retire and leave the skin damp with it while you sleep.

2. **FOR RED HANDS.**—Keep your feet warm by soaking them often in hot water, and keep your hands out of the water as much as possible. Rub your hands with the skin of a lemon and it will whiten them. If your skin will bear glycerine after you have washed, pour into the palm a little glycerine and lemon juice mixed, and rub over the hands and wipe off.

3. **NECK AND FACE.**—Do not bathe the neck and face just before or after being out of doors. It tends to wrinkle the skin.

4. **SCOWLS.**—Never allow yourself to scowl, even if the sun be in your eyes. That scowl will soon leave its trace and no beauty will outlive it.

5. **WRINKLED FOREHEAD.**—If you wrinkle your forehead when you talk or read, visit an oculist and have your eyes tested, and then wear glasses to fit them.

6. **OLD LOOKS.**—Sometimes your face looks old because it is tired. Then apply the following wash and it will make you look younger: Put three drops of ammonia, a little borax, a tablespoonful of bay rum, and a few drops of camphor into warm water and apply to your face. Avoid getting it into your eyes.

7. **THE BEST COSMETIC.**—Squeeze the juice of a lemon into a pint of sweet milk. Wash the face with it every night and in the morning wash off with warm rain water. This will produce a very beautiful effect upon the skin.

8. **SPOTS ON THE FACE.**—Moles and many other discolorations may be removed from the face by a preparation composed of one part chemically pure carbolic acid and two parts pure glycerine. Touch the spots with a camel's-hair pencil, being careful that the preparation does not come in contact with the adjacent skin. Five minutes after touching, bathe with soft water and apply a little vaseline. It may be necessary to repeat the operation, but if persisted in, the blemishes will be entirely removed.

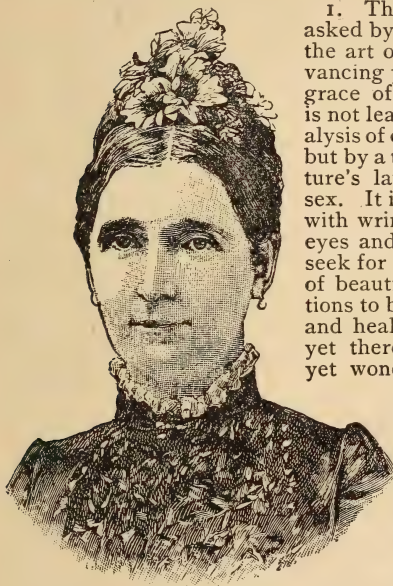
9. **WRINKLES.**—This prescription is said to cure wrinkles: Take one ounce of white wax and melt it to a gentle heat. Add two ounces of the juice of lily bulbs, two ounces of honey, two drams of rose water, and a drop or two of ottar of roses. Apply twice a day, rubbing the wrinkles the wrong way. Always use tepid water for washing the face.

10. **THE HAIR.**—The hair must be kept free from dust or it will fall out. One of the best things for cleaning it, is a raw egg rubbed into the roots and then washed out in several waters. The egg furnishes material for the hair to grow on, while keeping the scalp perfectly clean. Apply once a month.

11. **LOSS OF HAIR.**—When through sickness or headache the hair falls out, the following tonic may be applied with good effect: Use one ounce of glycerine, one ounce of bay rum, one pint of strong sage tea, and apply every other night, rubbing well into the scalp.

How to Keep the Bloom and Grace of Youth.

THE SECRET OF ITS PRESERVATION.



Wife of President Carnot,
of France.

1. The question most often asked by women is regarding the art of retaining, with advancing years, the bloom and grace of youth. This secret is not learned through the analysis of chemical compounds, but by a thorough study of nature's laws peculiar to their sex. It is useless for women with wrinkled faces, dimmed eyes and blemished skins to seek for external applications of beautifying balms and lotions to bring the glow of life and health into the face, and yet there are truths, simple yet wonderful, whereby the bloom of early life can be restored and retained, as should be the heritage of all God's children, sending the light of beauty into every woman's face. The secret :

2. Do not bathe in hard water ; soften it with a few drops of ammonia, or a little borax.

3. Do not bathe the face while it is very warm, and never use very cold water.

4. Do not attempt to remove dust with cold water ; give your face a hot bath, using plenty of good soap, then give it a thorough rinsing with warm water.

5. Do not rub your face with a coarse towel.

6. Do not believe you can remove wrinkles by filling in the crevices with powder. Give your face a Russian bath every night ; that is, bathe it with water so hot that you wonder how you can bear it, and then, a minute after, with moderately cold water, that will make your face glow with warmth ; dry it with a soft towel.

**MALE.****FEMALE.**

Showing the Difference in Form and Proportion,

Form and Deformity.

1. Physical Deformities. — Masquerading is a modern accomplishment. Girls wear tight shoes, burdensome skirts, corsets, etc., all of which prove so fatal to their health. At the age of seventeen or eighteen, our "young ladies" are sorry specimens of feminality; and palpitators, cosmetics and all the modern paraphernalia are required to make them appear fresh and blooming. Man is equally at fault. A devotee to all the absurd devices of fashion, he practically asserts that "dress makes the man." But physical deformities are of far less importance than moral imperfections.

2. Development of the Individual. — It is not possible for human beings to attain their full stature of humanity, except by loving long and perfectly. Behold that venerable man! he is mature in judgment, perfect in every action and expression, and saintly in goodness. You almost worship as you behold. What rendered him thus perfect? What

rounded off his natural asperities, and moulded up his virtues? Love mainly. It permeated every pore, and seasoned every fibre of his being, as could nothing else. Mark that matronly woman. In the bosom of her family she is more than a queen and goddess combined. All her looks and actions express the outflowing of some or all of the human virtues. To know her is to love her. She became thus perfect, not in a day or year, but by a long series of appropriate means. Then by what? Chiefly in and by love, which is specially adapted thus to develop this maturity.

3. **Physical Stature.** — Men and women generally increase in stature until the twenty-fifth year, and it is safe to assume, that perfection of function is not established until maturity of bodily development is completed. The physical contour of these representations plainly exhibits the difference in structure, and also implies difference of function. Solidity and strength are represented by the organization of the male, grace and beauty by that of the female. His broad shoulders represent physical power and the right of dominion, while her bosom is the symbol of love and nutrition.

HOW TO DETERMINE A PERFECT HUMAN FIGURE.

The proportions of the perfect human figures are strictly mathematical. The whole figure is six times the length of the foot. Whether the form be slender or plump, this rule holds good. Any deviation from it is a departure from the highest beauty of proportion. The Greeks made all their statues according to this rule. The face, from the highest point of the forehead, where the hair begins, to the end of the chin, is one-tenth of the whole statue. The hand, from the wrist to the end of the middle finger, is the same. The chest is a fourth, and from the nipples to the top of the head is the same. From the top of the chest to the highest point of the forehead is a seventh. If the length of the face, from the roots of the hair to the chin, be divided into three equal parts, the first division determines the point where the eyebrows meet, and the second the place of the nostrils. The navel is the central point of the human body; and if a man should lie on his back with his arms and legs extended, the periphery of the circle which might be described around him, with the navel for its center, would touch the extremities of his hands and feet. The height from the feet to the top of the head is the same as the



Lady's Dress in the days of Greece.

distance from the extremity of one hand to the extremity of the other when the arms are extended.

The Venus de Medici is considered the most perfect model of the female forms, and has been the admiration of the world for ages. Alexander Walker, after minutely describing this celebrated statue, says: "All these admirable characteristics of the female form, the mere existence of which in woman must, one is tempted to imagine, be, even to herself, a source of ineffable pleasure, these constitute a being worthy, as the personification of beauty, of occupying the temples of Greece; present an object finer, alas, than Nature even seems capable of producing; and offer to all nations and ages a theme of admiration and delight. Well might Thomson say:

So stands the statue that enchants the world,
So, bending, tries to veil the matchless boast —
The mingled beauties of exulting Greece.

We beg our readers to observe the form of the waist (evidently innocent of corsets and tight dresses) of this model woman, and also that of the Greek Slave in the accompanying outlines. These forms are such as unperverted nature and the highest art alike require. To compress the waist, and thereby change its form, pushing the ribs inward, displacing the vital organs, and preventing the due expansion of the lungs, is as destructive to beauty as it is to health.

THE HISTORY, MYSTERY, BENEFITS AND INJURIES OF THE CORSET.

1. The origin of the corset is lost in remote antiquity. The figures of the early Egyptian women show clearly an artificial shape of the waist produced by some style of corset. A similar style of dress must also have prevailed among the ancient Jewish maidens; for Isaiah, in calling upon the women to put away their personal adornments, says: "Instead of a girdle there shall be a rent, and instead of a stomacher (corset) a girdle of sackcloth."

2. Homer also tells us of the cestus or girdle of Venus, which was borrowed by the haughty Juno with a view to increasing her personal attractions, that Jupiter might be a more tractable and orderly husband.

3. Coming down to the later times, we find the corset was used in France and England as early as the 12th century.

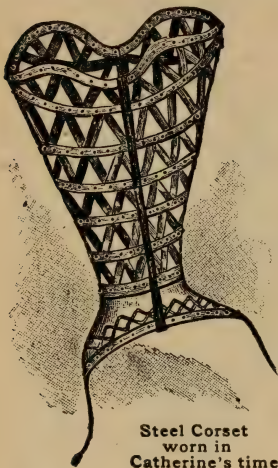
4. The most extensive and extreme use of the corset occurred in the 16th century, during the reign of Catherine de Medici of France and Queen Elizabeth of England. With Catherine de Medici a thirteen-inch waist measurement was considered the standard of fashion, while a thick waist was an abomination. No lady could consider her figure of proper shape unless she could span her waist with her two hands. To produce this result a strong rigid corset was worn night and day until the waist was laced down to the required size. Then over this corset was placed the steel apparatus shown in the illustration on next page. This corset-cover reached from the hip to the throat, and



The Corset in the 18th Century.

produced a rigid figure over which the dress would fit with perfect smoothness.

5. During the 18th century corsets were largely made from a species of leather known as "Bend", which was not unlike that used for shoe soles, and measured nearly a quarter of an inch in thickness. One of the most popular corsets of the time was the corset and stomacher shown in the accompanying illustration.



Steel Corset
worn in
Catherine's time.

6. About the time of the French Revolution a reaction set in against tight lacing and for a time there was a return to the early classical Greek costume. This style of dress prevailed, with various modifications, until about 1810, when corsets and tight lacing again returned with threefold fury. Buchan, a prominent writer of this period, says that it was by no means uncommon to see "a mother lay her daughter down upon the carpet, and, placing her foot upon her back, break half a dozen laces in tightening her stays."

7. It is reserved to our own time to demonstrate that corsets and tight lacing do not necessarily go hand in hand. Distortion and feebleness are not beauty. A proper proportion should exist between the size of the waist and the breadth of the shoulders and hips, and if the waist is diminished below this proportion, it suggests disproportion and invalidism rather than grace and beauty.

8. The perfect corset is one which possesses just that degree of rigidity which will prevent it from wrinkling, but will at the same time allow freedom in the bending and twisting of the body. Corsets boned with whalebone, horn or steel are necessarily stiff, rigid and uncomfortable. After a few days' wear the bones or steels become bent and set in position, or, as more frequently happens, they break and cause injury or discomfort to the wearer.

9. About seven years ago an article was discovered for the stiffening of corsets, which has revolutionized the corset industry of the world. This article is manufactured from

the natural fibers of the Mexican Ixtle plant, and is known as Coraline. It consists of straight, stiff fibers like bristles, bound together into a cord by being wound with two strands of thread passing in opposite directions. This produces an elastic fiber intermediate in stiffness between twine and whalebone. It cannot break, but it possesses all the stiffness and flexibility necessary to hold the corset in shape and prevent its wrinkling.

We congratulate the ladies of to-day upon the advantages they enjoy over their sisters of two centuries ago, in the forms and the graceful and easy curves of the corsets now made as compared with those of former times.

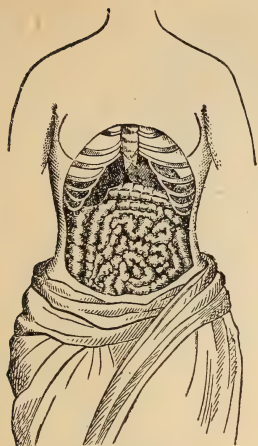
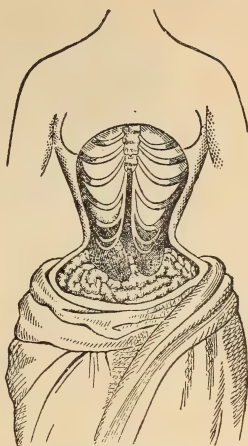


Forms of Corsets in the time of Elizabeth of England.

**EGYPTIAN CORSET.**

TIGHT-LACING.

It destroys natural beauty and creates an unpleasant and irritable temper. A tight-laced chest and a good disposition cannot go together. The human form has been molded by nature, the best shape is undoubtedly that which she has given it. To endeavor to render it more elegant by artificial means is to change it; to make it much smaller below and much larger above is to destroy its beauty; to keep it cased up in a kind of domestic cuirass is not only to deform it, but to expose the internal parts to serious injury. Under such compression as is commonly practiced by ladies, the de-

**THE NATURAL WAIST.****THE EFFECTS OF LACING.**

velopment of the bones, which are still tender, does not take place conformably to the intention of nature, because nutrition is necessarily stopped, and they consequently become twisted and deformed.

Those who wear these appliances of tight-lacing often complain that they cannot sit upright without them—are sometimes, indeed, compelled to wear them during all the twenty-four hours ; a fact which proves to what extent such articles weaken the muscles of the trunk. The injury does not fall merely on the internal structure of the body, but also on its beauty, and on the temper and feelings with which that beauty is associated. Beauty is in reality but another name for expression of countenance, which is the index of sound health, intelligence, good feelings and peace of mind. All are aware that uneasy feelings, existing habitually in the breast, speedily exhibit their signature on the countenance, and that bitter thoughts or a bad temper spoil the human expression of its comeliness and grace.



HOW TO TAKE CARE OF THE TEETH.

1. Teeth should be thoroughly cleansed every morning with a tooth-brush.
2. A wooden or quill tooth-pick should be used after every meal.
3. Professor Miller, an eminent authority on dental science, announces that the decay of teeth is contagious or transferable to others, and that the disease consists of bacilli.
4. When teeth are decayed the dentist should be consulted at once. Powdered charcoal is one of the best and most excellent applications for the teeth. It should be powdered very fine and applied to the teeth with a soft rag.
5. The teeth should never be used for the purpose of cracking nuts, cutting thread, etc.

A GOOD TOOTH POWDER.

Take of Prepared chalk, 7 drachms,
Powdered orris-root, 1 drachm.

Use every other morning.



HOW TO KEEP THE FRONT TEETH PERFECTLY WHITE.

Wipe them off with a clean linen handkerchief, and then wind a corner of the handkerchief around the finger and rub the teeth hard and thoroughly twice a day. The results will be excellent.

AN EXCELLENT TOOTH POWDER.

Suds of castile soap and spirits of camphor, of each an equal quantity, thicken with equal quantities of pulverized chalk and charcoal to a thick paste. Apply with the finger or brush.

HOW TO CURE A BAD BREATH.

Bad breath from catarrh, foul stomach, or bad teeth, may be temporarily relieved by diluting a little bromo chloralum with 3 or 10 drops of water and using it as a gargle, and swallowing a few drops before going out. A pint of bromo chloralum costs fifty cents, but a small vial will last a long time.



A PERFECT ARM AND HAND.

How to Take Care of the Hands.

To prevent chapping and roughness of the hands, soap should be used very sparingly and the hands should never be washed just before going out of doors. If the hands are inclined to be rough, it is best to use a little mutton tallow after each washing.

Buckskin, kid, dogskin, or other forms of leather, should be worn in cold weather. Silk and woolen gloves and mittens are more likely to produce roughness.

To Whiten the Hands.

Wash the hands in water containing a few drops of bay rum and ammonia.

Or, take one half teacupful of cologne water, and another of lemon juice; scrape into it two cakes of Brown Windsor soap. Mix well and let it harden. This will be an excellent soap for whitening the hands.

To Whiten the Nails.

2½ drams diluted Sulphuric acid,
1¼ drams tincture of myrrh,
4½ ounces rain water. Mix.

First wash the hands with castile soap, and then apply a little of the above wash.

Chapped Hands.

Wash the hands in water as hot as can be borne; then apply mutton tallow, cosmoline or a little carbolic acid and water.



QUEEN ELIZABETH OF ENGLAND,
Known as the Virgin Queen.

HOW LADIES SHOULD DRESS.

1. In the dress of ladies, great latitude is allowed ; but the aim of the gentle sex should be simplicity and taste.

2. A lady must always consider what colors will suit her complexion. If she be dark, blue will not look well upon her ; or if she be fair, pink will not become her. The most trying color is yellow. Only very pronounced brunettes can wear it. A lady must also take her size into consideration in selecting her dress. Stripes running the length of the dress have the effect of making a short person look taller, and should not be worn by a tall person,

3. The street dress of a lady should be simple and without display. To dress conspicuously or in brilliant colors for the street is a sign of bad breeding. In bad weather, a light India-rubber waterproof with a hood is more convenient and a better protection than an umbrella. To wear much jewelry on the street is vulgar. In large cities it subjects a lady to the danger of robbery or to conspicuous notice.

4. For church the dress should be simple and plain. Very little jewelry should be worn, and the costume should be of quiet colors. It is a mark of bad taste for ladies to attend church elaborately or conspicuously dressed.

5. Modesty in dress and behavior add more charm to woman than the rustle of silk or the glitter of gold.

Hair Dressings

OF



QUEEN MARY,
Wife of William III.



QUEEN ANNE.

Different Styles of Wearing the Hair in the 18th Century.



**STYLE IN
1776.**



**STYLE IN
1776.**



**STYLE IN
1780.**



**STYLE IN
1790.**

Styles of Wearing the Hair in the beginning of the 19th Century.

**STYLE IN
1800.**



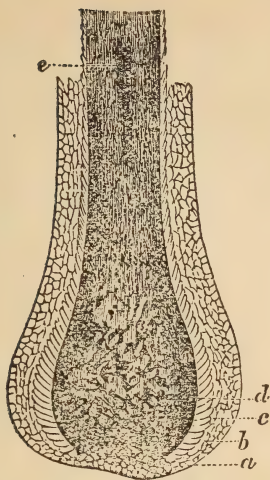
**STYLE IN
1800.**



**STYLE IN
1820.**



**STYLE IN
1840.**



A ROOT OF HAIR.

Representation of a Hair highly magnified.

a, Basement membrane of hair follicle; *b*, layer of cells resting upon it, which become more scaly as they approach *c*, and form the cortex. The medullary substance of the hair consists of cells at the base; at *d* they become elongated and finally fibrous; *e*, coloring matter of hair.

The Structure of the Hair.

1. The whole body, except the palms of the hands and the soles of the feet, is covered with hair. The hair of the head in different individuals embraces a vast variety of color, length and quality.

2. **Root of the Hair.** — The root of the hair is made of two parts, sheath and bulb. The bulb is two or three times the diameter of the hair and is made up of cells.

3. **The Bulb** is the enlargement of the root as shown in the above figure, and the color of the hair is developed in the bulb. In gray hair there is no coloring matter. Thus it is seen that when the bulb becomes diseased, and the root of the hair dies, it must naturally fall out, just as the tree whose root is dead must decay and fall.

4. **Growth of Hair.** — The growth of all hair takes place in the root, which is supplied with blood vessels. A hair is nothing more nor less than a little tube and its growth largely

depends on the condition of health. Many people lose their hair on account of a diseased or debilitated constitution. When the hair commences falling out, it is always well to take a good tonic and keep the constitution in good repair, and it may be possible to preserve the hair for many years.

FALLING OUT OF THE HAIR.

1. No Absolute Cure.— There are no absolute remedies that will restore hair after it is diseased and has fallen out. A remedy of that kind would be worth millions to the discoverer. There are some hair tonics, however, that are beneficial and have a restorative effect on the hair, if taken in time. When the roots are dead there is no restoration, as there is nothing left to grow. All those patent remedies claiming to restore lost hair are the deceptions of money schemers. Hair coming out in case of sickness has generally considerable vitality.

2. Clipping. When after an illness the hair falls out it should be cut short and kept clipped for at least 12 months. Wash the scalp regularly two or three times a week with the following hair tonic :

Tinct. bloodroot, 2 drachms ; Tinct. lobelia, 1 drachm ; Tinct. capsicum, 2 drachms ; Tinct. cantharides, 2 drachms ; Glycerine, 2 ounces ; Alcohol, 7 ounces ; Bay rum, 7 ounces ; Sul. quinine, 20 grains.

Dissolve the quinine in the alcohol first, and then add the other ingredients.

Apply at night, rubbing freely into the scalp.

This remedy has been proven to be among the best and can be safely applied under any and all circumstances where the hair shows signs of deadness and is falling out.

3. Dandruff, or Loose Scurf.— Where there is a loose scurf and dandruff, apply the following preparation once a week : Yolk of one egg ; Warm rain water one pint ; Bay rum one oz.

Beat the ingredients thoroughly together, and use it warm, rubbing the scalp thoroughly. The best hair wash is warm water and tar soap, that is the best remedy for cleaning the hair and removing dandruff. It is always best to avoid all Barbers' Shampoos, and all other strong liquids manufactured for the purpose of removing dandruff. They are injurious to both hair and scalp. If the hair is dry after washing, apply a little hair oil made of one part castor oil and three parts alcohol.

4. Hair Oil of all kinds should be carefully avoided ; if the hair is very dry and stiff, a little oil made as above may

be used, otherwise avoid all oil, grease, or pomades of any kind. If you desire to preserve your natural growth of hair, with a natural healthy gloss, use only water or a weak solution of bay rum.

5. Dying. — If you desire to preserve your hair, carefully avoid all kinds of hair dye; there are some remedies that will darken the hair without injuring it, but any of the regular hair dyes, such as are commonly used, are unsafe and injurious. The color nature has bestowed upon the human hair is more perfect and more beautiful than any imitations which can be produced by any system of dying. Gray locks come with age and are an adornment and not a disgrace.

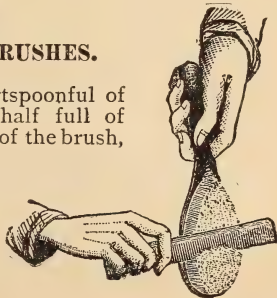
6. Hair Tonic or Wash made of the following : Bay rum, 4 oz.; Rain water, 4 oz.; Quinine, 20 grains; is one of the best hair tonics and restoratives for general daily use made. It promotes vigor, growth, and keeps the hair soft and glossy. If the hair is very light, falls out and breaks, the quinine wash should be applied every night before retiring.

HOW TO REMOVE SUPERFLUOUS HAIR.

Sulphuret of arsenic, 1 ounce; Quicklime, 1 ounce; Prepared lard, 1 ounce; White wax, 1 ounce. Melt the wax; add the lard. When nearly cold, stir in the other ingredients. Apply to the superfluous hair, allowing it to remain on from five to ten minutes; use a table-knife to shave off the hair; then wash with soap and warm water. Great care must be used not to allow much of the preparation to touch the skin.

HOW TO CLEAN HAIR BRUSHES.

Put a teaspoonful or dessertspoonful of aqua ammonia into a basin half full of water, comb the loose hairs out of the brush, then agitate the water briskly with the brush, and rinse it well with clear water.





HOW TO TAKE CARE OF THE HAIR.

How to Prepare Your Own Hair Oil, Tonics, Shampoos, and the Different Preparations for the Hair and Beard.

1. Cleanliness is the first requisite to a healthy vigorous growth of hair. It should be kept clean by brushing, combing and washing the scalp thoroughly with soap and water at least once in two weeks.
2. It is best to trim the ends of the hair once a month to continue a healthy growth.
3. Washing the hair once a day in cold water, produces the healthiest, most lasting growth of hair. Avoid the strong shampoo liquids generally used by barbers.
4. There are many cases in which the loss of hair cannot be remedied, but there are cases where an application of good healthy tonics and proper care will restore a new and sufficient growth.
5. If the hair is inclined to come out, AVOID ALL BARBER'S SHAMPOOS AND SEA FOAMS.
6. Avoid hair oils unless the hair is very stiff and dry, and then use it sparingly.
7. Most all hair dyes are very injurious, and unless the growth of hair is vigorous, it should be carefully avoided.

A GOOD HAIR OIL.

Castor oil, 1 quart,
Alcohol, 95 per cent, 3 quarts,
Oil of verbena, 3 drachms.

Mix them them thoroughly.

If you desire it colored, use a little Tinct Alkanet Root.

TO DARKEN THE HAIR.

The following receipt will gradually darken the hair and produce no injurious results.

Rain water, $\frac{1}{2}$ pint,
Alcohol, 1 ounce,
Essence of Rose, 12 drops,
Powdered Blue Vitrol, 1 drachm.

Mix thoroughly.

Fine Shampoo Liquid.

Dissolve $\frac{1}{2}$ ounce carb. of ammonia and 1 ounce of borax in 1 qt. of water, then add

2 ounces glycerine,
3 qts. of New England rum,
1 qt. of bay rum.

Moisten the hair with this liquor; shampoo with the hands until a slight lather is formed, then wash off with clean water.

Sea Foam for Barbers.

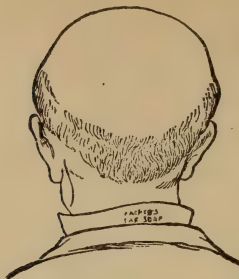
4 ounces alcohol,	$\frac{1}{2}$ ounce ammonia,
1 ounce castor oil,	1 pint rain water.

Dissolve the castor oil and ammonia in the alcohol, then add the alcohol mixture to the water.

N. B.—Good healthy hair requires no tonics, oil or shampoo liquids, warm water and pure soap only.

DANDRUFF ON BABY'S HEAD.

Grease with chicken oil, or fresh unsalted butter, or sweet cream; then remove by combing.



To Prevent the Hair from Falling Out.

Wetting the hair thoroughly once or twice a week with a weak solution of salt water will prevent it from falling out.

HAIR TONIC.

TO KEEP THE HAIR FROM FALLING OUT.

Tinct. bloodroot, 2 drachms,
 Tinct. lobelia, 1 drachm.
 Tinct. capsicum, 2 drachms,
 Tinct. cantharides, 2 drachms,
 Glycerine, 2 ounces,
 Alcohol, 7 ounces,
 Bay rum, 7 ounces,
 Sul. quinine, 20 grains.

Dissolve the quinine in the alcohol first, and then add the other ingredients.

Apply at night, rubbing freely into the scalp.

A Celebrated Liquid for Curling the Hair.

Most receipts for curling the hair are very injurious, but the following is harmless and excellent.

Glycerine, $\frac{1}{4}$ ounce,
 Rectified spirits, $1\frac{1}{4}$ ounce,
 Distilled water, 16 ounces,
 Liquor of ammonia, 1 drachm,
 Dry salts of tartar, 1 drachm,
 Powdered cochineal, $\frac{1}{2}$ drachm,
 Essence of rose, $\frac{3}{4}$ drachm.

Mix and let it stand 10 days, then filter and moisten the hair while combing it.

PRACTICAL HINTS FOR SHAVING.



How to Sharpen a Razor, Keep the Face Smooth, Color the Beard, Cure Pimples, and Various Preparations for the Face.

1. TO MAKE A GOOD RAZOR STROP, take a piece of an old leather belt, which has been used on some threshing machine or factory machinery, cut it narrow and oil it well. No better strop in use.

2. Take a piece of new kip leather and oil it well with wagon grease. Be sure not to take the grease from the outside of the wheel, as it is filled with too much dust and dirt.

3. No one shaving himself should neglect the use of *Bay Rum*, or a good face wash after shaving. It keeps the skin smooth and soft, and makes shaving an easy task.

4. One of the best and cheapest washes for the face, to use after shaving, is the following :

2 oz. Glycerine,
1 oz. Tincture Benzoin,
1 oz. Rose Water.

ORIENTAL SHAVING CREAM.

4 ounces oil of almonds.
 2 drams white wax,
 2 drams spermaceti.

Melt, and add rose water, 4 ounces; orange flower water, 1 ounce; used to soften the skin, apply as the last.

LIQUID FOR FORCING THE BEARD.

2 ounces cologne,
 1 dr. liquid hartshorn,
 2 drs. tincture cantharides,
 12 drops oil rosemary,
 12 drops lavender.

Apply to the face daily, and await result. Said to be reliable

A CURE FOR PIMPLES ON THE FACE.

50 drops carbolic acid,
 3 oz. glycerine,
 1 oz. rose water.

This is one of the best and safest remedies in use. Many of the so-called *Pimple Cures*, do more injury than good.

BARBER'S ITCH OINTMENT.

1 pound olive oil,
 1 pound suet,
 2 ounces alkanet root.

Melt, and macerate until colored; then strain, and add 3 ounces of alum, nitre and sulphate of zinc, in very fine powder, adding vermilion to color it, and oil of anise-seed, lavender and thyme to perfume.

A GOOD RAZOR-STROP PASTE.

Wet the strop with a little sweet oil, and apply a little flour of emery evenly over the surface.

CLIFFORD'S SHAMPOO COMPOUND.

$\frac{3}{4}$ lb. of borax,
 $\frac{1}{4}$ lb. of salts tartar.

Mix and dissolve 1 ounce of the mixture in 1 pint of water.

HOW TO REMOVE WARTS AND MOLES FROM THE FACE.

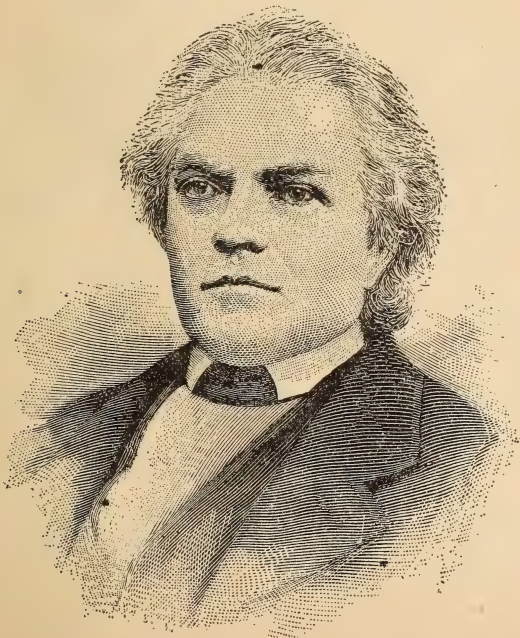
205

Where there are several warts and moles appearing on different parts of the face and hands, especially on young people, it is a sign of a debilitated constitution, and some good tonic is necessary. A few bottles of Sarsaparilla will usually be sufficient, or a dose of sulphur at night for two or three weeks will probably have the necessary effect. Warts, however, should be removed, and also the moles of large size. The tonic prevents others from coming.

Where the warts and moles are very large, a scar is liable to be left. A thin layer of some form of wax should be put around the wart or mole so that the face will be perfectly protected, then apply, repeatedly, either strong acetic acid, caustic potash, nitric acid, or nitrate of silver.

If the wart is sufficiently large, it may be removed by winding around it first a silk or silver thread, and after it is dried and shriveled, cauterize with a little nitrate of silver.

The very best treatment however, is electrolysis, and it is done by a galvanic battery; this should be done by the profession who understand the business.



HOW TO TAKE CARE OF THE FEET.



HOW TO CURE CORNS, CHILBLAINS, INGROWING NAILS, COLD FEET, ETC.

CORN CURE.

Soak the feet thoroughly in hot water and remove all the hard skin with a sharp knife and apply kerosene oil. This process repeated twice a week will cure the worst case of corns, providing a loose-fitting shoe is worn.

HOW TO REMOVE CORNS FROM BETWEEN THE TOES.

These corns are generally more painful than any others, and are frequently situated so as to be almost inaccessible to the usual remedies. Wetting them several times a day with harts-horn will in most cases cure them.

Do not use those Patent Medicine Cures, they are almost always sure to make you serious trouble.

A CURE FOR CHILBLAINS.

1. The first thing to relieve distress is gentle rubbing with the hands and the wearing of loose and easy-fitting shoes.
2. If irritation continues, apply a little camphor and water or a weak solution of carbolic acid and water.



Injured by shoe
too short.

Natural Foot.

Cramped toes
from tight shoes.

HOW TO CURE BUNIONS.

A bunion is nothing more or less than a large corn, and is generally caused by wearing short, high-heeled, and narrow soled shoes, which throw the weight of the body on the front part of the foot.

Home Remedy :—Take a small, flat and hollow Indian rubber ring or band and place it over the bunion so as to keep off the pressure of the shoe. A cotton band may be used.

When the pain is severe, it should be poulticed with a bread and milk poultice.

Kerosene treatment recommended for corns is also very efficient. Or touch it with a little Nitrate of silver occasionally.

ANTIDOTES FOR COLD FEET.

Cold feet are generally the result of profuse perspiration. Put small quantities of pulverized alum in the stockings every morning. Bathe the feet every night in warm water and saleratus.

Cold feet are sometimes the result of poor circulation. In that case the general health should be toned up.



An Unhealthy Shoe.



Effects of Tight Shoes.

THE EFFECTS OF WEARING TIGHT SHOES.

The above illustration shows the effects of high-heeled tight shoes. Also the effects of cramping the toes.

No sensible person can really suppose there is anything unpleasant, or even unsightly in the form of a perfect human foot, and yet all attempts to construct shoes upon a sensible model are met with extreme objections. Fashion must be favored with a fashionable shoe, which injures not only the foot, but in many instances results in serious injury of health itself.

The foolish custom of wearing tight and high-heeled shoes is accompanied with more serious results to general health and comfort than almost any other whim of fashion.

Remember that a natural foot in a comfortable shoe will save you much distress, and many hours of discomfort.

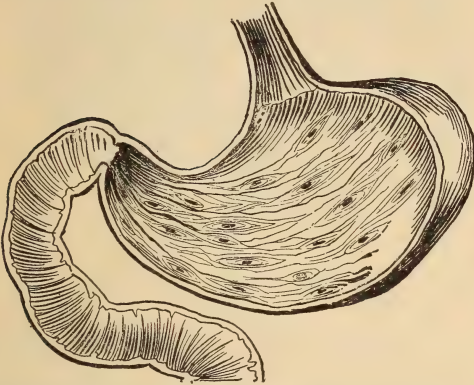
HOW TO CURE INGROWING NAILS.

The ingrowing nail is caused by wearing tight shoes or boots, or by an improper mode of cutting the nails.

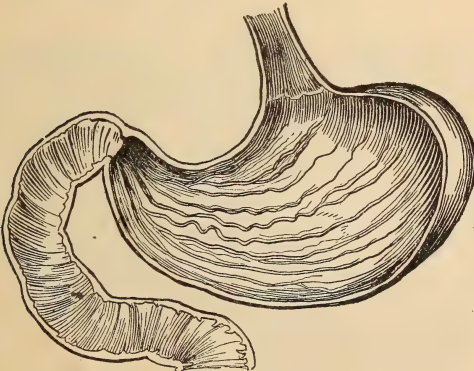
REMEDY. Scrape the nails in the centre with a sharp knife or piece of glass until it becomes very thin and tender. Keep it scraped in until cured. If it has become very sore the nail should be cut away from the irritated or ulcerated part and dressed twice a day with cosmoline.

**OBJECT LESSONS OF THE EFFECTS OF ALCOHOL
AND CIGARETTE SMOKING.**

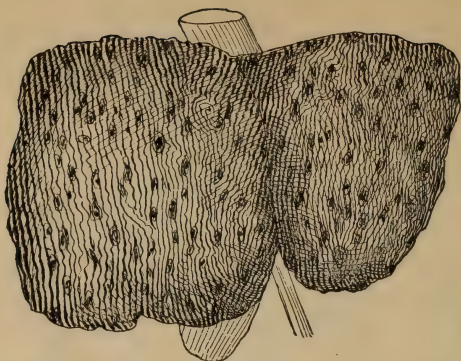
By PROF. GEORGE HENKLE, who personally made the post-mortem examinations and drew the following illustrations from the diseased organs just as they appeared when first taken from the bodies of the unfortunate victims.



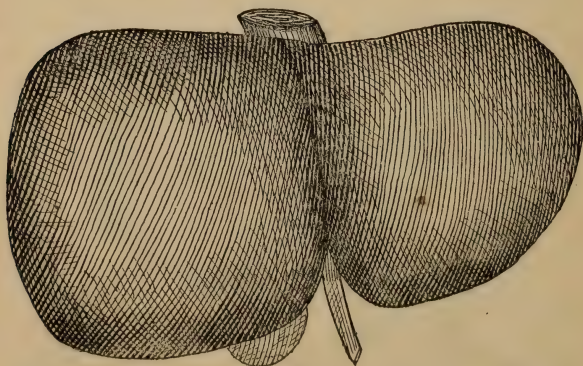
THE STOMACH of an habitual drinker of alcoholic stimulants, showing the ulcerated condition of the mucous membrane, incapacitating this important organ for digestive functions.



THE STOMACH (interior view) of a healthy person with the first section of the small intestines.



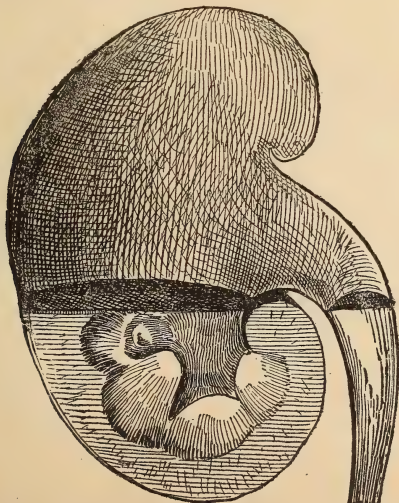
The Liver of a drunkard who died of Cirrhosis of the liver, also called granular liver, or "gin drinker's liver." The organ is much shrunken and presents rough, uneven edges, with carbuncular non-suppurative sores. In this self-inflicted disease the tissues of the liver undergo a cicatrical retraction, which strangulates and partly destroys the parenchyma of the liver.



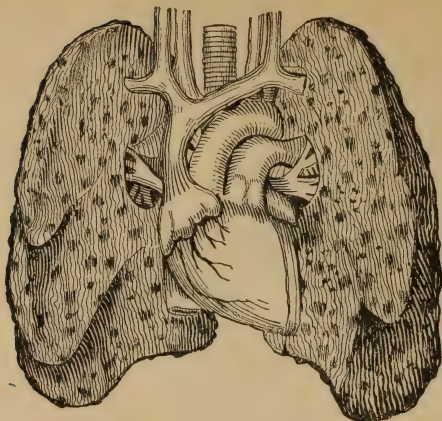
THE LIVER IN HEALTH.



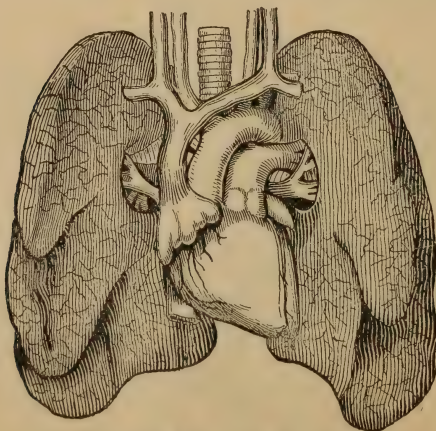
THE KIDNEY of a man who died a drunkard, showing in upper portion the sores so often found on kidneys of hard drinkers, and in the lower portion, the obstruction formed in the internal arrangement of this organ. Alcohol is a great enemy to the kidneys, and after this poison has once set in on its destructive course in these organs no remedial agents are known to exist to stop the already established disease.



THE KIDNEY in health, with the lower section removed, to show the filtering apparatus (Malpighian pyramids). Natural size.



The Lungs and Heart of a boy who died from the effects of cigarette smoking, showing the nicotine sediments in lungs and shrunken condition of the heart.



THE LUNGS AND HEART IN HEALTH.



A section of the diseased Lung of a cigarette smoker, highly magnified.

THE DESTRUCTIVE EFFECTS OF CIGARETTE SMOKING.

Cigarettes have been analyzed, and the most physicians and chemists were surprised to find how much opium is put into them. A tobacconist himself says that "the extent to which drugs are used in cigarettes is appalling." "Havana flavoring" for this same purpose is sold everywhere by the thousand barrels. This flavoring is made from the tonka-bean, which contains a deadly poison. The wrappers, warranted to be rice paper, are sometimes made of common paper, and sometimes of the filthy scrapings of ragpickers bleached white with arsenic. What a thing for human lungs.

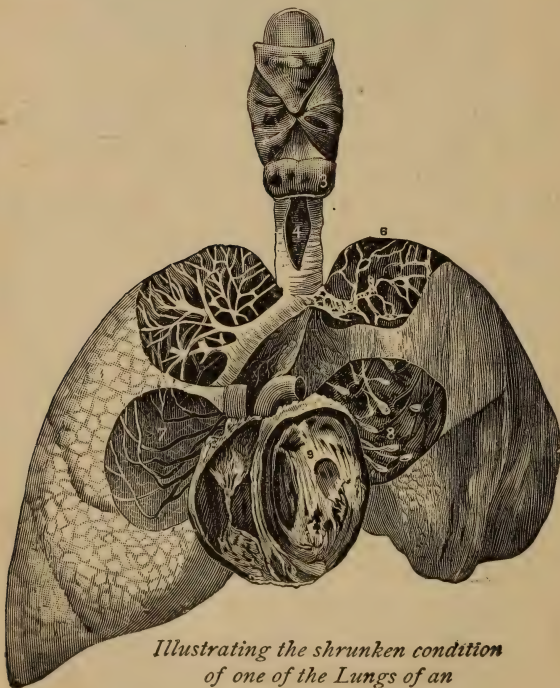
The habit burns up good health, good resolutions, good manners, good memories, good faculties, and often honesty and truthfulness as well

Cases of epilepsy, insanity and death are frequently reported as the result of smoking cigarettes, while such physicians as Dr. Lewis Sayre, Dr. Hammond, and Sir Morell Mackenzie of England, name heart trouble, blindness, cancer and other diseases as occasioned by it.

Leading physicians of America unanimously condemn

cigarette smoking as "one of the vilest and most destructive evils that ever befell the youth of any country," declaring that "its direct tendency is a deterioration of the race."

Look at the pale, wilted complexion of a boy who indulges in excessive cigarette smoking. It takes no physician to diagnose his case, and death will surely mark for his own every boy and young man who will follow up the habit. It is no longer a matter of guess. It is a scientific fact **which** the microscope in every case verifies.



*Illustrating the shrunken condition
of one of the Lungs of an
excessive smoker.*

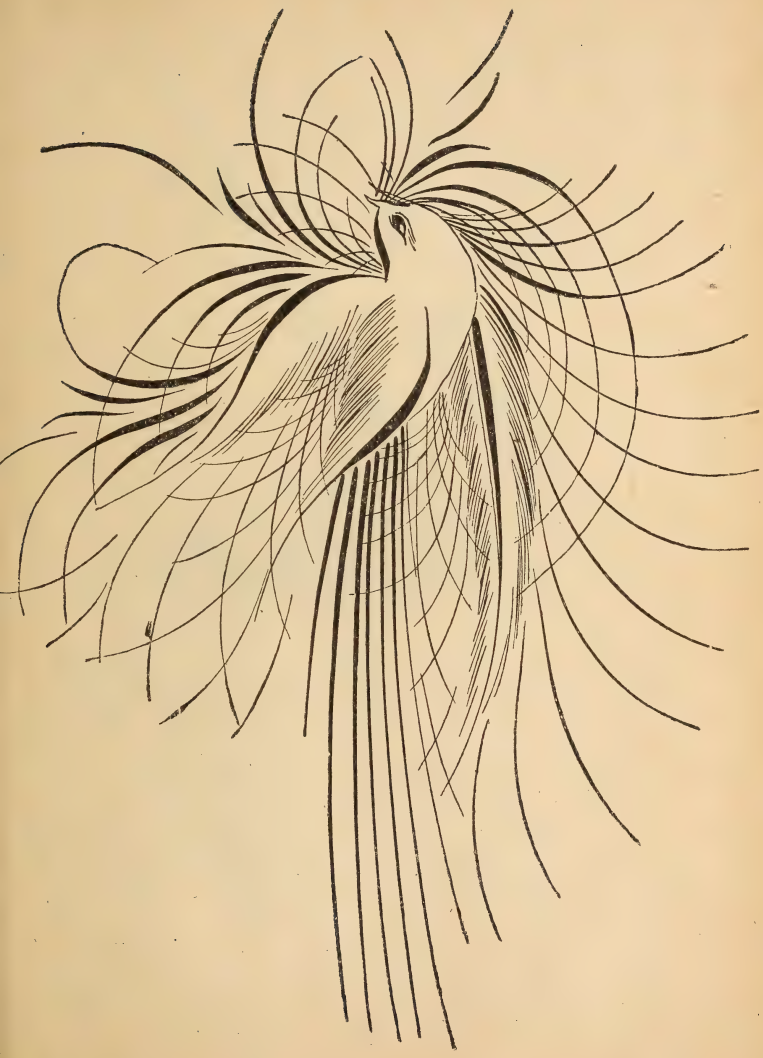
THE COST OF SMOKING.

The following figures show the expense of smoking two cigars and three cigars a day, at 5 cents each, and at 10 cents each, from the age of 20 to the end of each period of five years, up to the age of 70, 6 per cent. compound interest semi-annually being reckoned upon the money :

From the Age of—	Two Cigars a Day at 5 Cents Each.		Three Cigars a Day at 5 Cents Each.	
	Principal.	Prin. & Int.	Principal.	Prin. & Int.
20 to 25 years.....	\$ 182.50	\$ 209.21	\$ 273.75	\$ 313.95
20 to 30 ".....	365.00	490.39	547.50	745.74
20 to 35 ".....	574.50	868.25	821.25	1,314.72
20 to 40 ".....	730.00	1,376.08	1,095.00	2,081.16
20 to 45 ".....	912.50	2,058.44	1,368.75	3,110.74
20 to 50 ".....	1,095.00	3,094.99	1,642.50	4,494.41
20 to 55 ".....	1,277.50	4,367.46	1,916.25	6,353.87
20 to 60 ".....	1,460.00	6,078.73	2,190.00	8,655.02
20 to 65 ".....	1,642.50	8,378.52	2,463.75	12,215.36
20 to 70 ".....	1,825.00	11,469.25	2,737.10	16,216.37

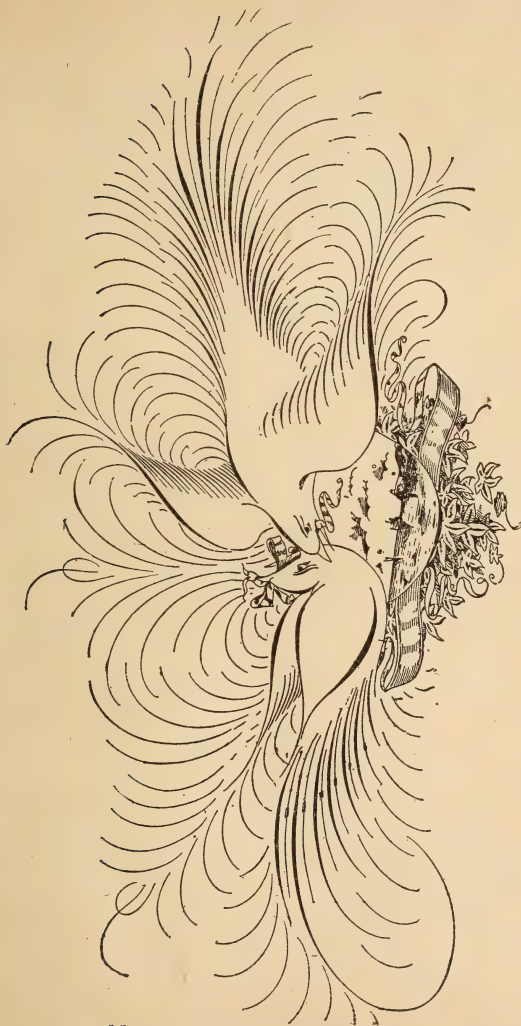
From the Age of—	Two Cigars a Day at 10 Cents Each.		Three Cigars a Day at 10 Cents Each.	
	Principal.	Prin. & Int.	Principal.	Prin. & Int.
20 to 25 years.....	\$ 365.00	\$ 418.43	\$ 547.50	\$ 627.95
20 to 30 ".....	730.00	980.78	1,095.00	1,471.56
20 to 35 ".....	1,095.00	1,736.52	1,642.50	2,717.85
20 to 40 ".....	1,460.00	2,752.20	2,190.00	4,281.24
20 to 45 ".....	1,825.00	4,115.92	2,737.50	6,382.47
20 to 50 ".....	2,190.00	5,949.88	3,285.00	9,205.16
20 to 55 ".....	2,555.00	8,414.47	3,832.50	12,998.61
20 to 60 ".....	2,920.00	11,738.03	4,380.00	18,100.14
20 to 65 ".....	3,285.00	16,093.51	3,927.50	24,952.72
20 to 70 ".....	3,650.00	21,937.72	5,475.00	34,162.14







A B C D E F G H
I J K L M N
O P Q R S T U
V W X Y Z



How to Write Invitations.

Invitation to dinner conveys a great mark of respect. It is the highest social compliment that can be offered by one person to another.

Dinner parties rank first among all entertainments, and they are a great source of elevation and education.

An invitation to dine should be promptly answered, whether accepted or declined.

FORM OF INVITATION.

Mr. and Mrs. R. Q. Hall request the favor of Mr. Jay's company at dinner on Thursday, the 25th, at 2 o'clock

THE REPLY.

Mr. Jay has the pleasure to accept Mr. and Mrs. Hall's kind invitation to dinner on Thursday, the 25th

IF DECLINED,

Some Good Reasons should be Given.

Mr. Jay regrets that, owing to previous engagements, he cannot have the pleasure of accepting Mr. and Mrs. Hall's kind invitation for Thursday next



INVITATIONS.

INVITATION TO SPEND THE EVENING.

Mrs. E. C. Wicks requests the pleasure of Mr. and Mrs. J. L. Nichols' company on Thursday Evening, June 15th, at six o'clock.

Tea at 6:30

Meriden, Illinois

ACCEPTANCE.

Mr. and Mrs J. L. Nichols have much pleasure in accepting Mrs. Wicks' kind invitation for Thursday Evening, June 15th.

Young People's Invitation.

Mr. Brown solicits the honor of attending Miss Williams to the lecture on Thursday evening, March 23d.

Tuesday, March 21st.
The bearer will wait for the answer.

Acceptance.

Miss Williams has much pleasure in accepting Mr. Brown's kind invitation to the lecture Thursday evening, March 23d.
Tuesday, March 21st.

Regret.

Miss Williams regrets that she cannot accept Mr. Brown's polite invitation for the lecture Thursday evening, March 23d.
Tuesday, March 21st.

Regret.

Miss Williams regrets that, owing to the dangerous illness of a dear friend, she is unable to accept Mr. Brown's kind invitation to the lecture Thursday evening, March 23d.
Tuesday, March 21st.



To Meet Visiting Friends.

Mr. and Mrs. John C. Sawyer request the pleasure of Mr. W. N. Tarnutzer's company, on Friday evening, November 19th, from eight to eleven o'clock, to meet Wm. Emerich.

Broad and Walnut Sts., Philadelphia.

EXCURSION.

Mr. Weber would be pleased to have your company on Thursday, Sept. 14th, to visit the park.

Carriages will be in waiting at the Continental Hotel at 4 o'clock P. M.

Continental Hotel. R. S. V. P.

Mr. Taylor solicits the honor of attending Miss Lyman to the Opera on Thursday evening next.

Tuesday, Nov. 7.

The bearer will wait for the answer.

* *R. S. V. P. French, "Answer if you please."*

If the parties are very intimate friends, the formal and ceremonious style may be dropped and that of a familiar letter adopted, as in the following :

Saturday Morning, May 10.

Dear Carrie,

We are going to Irving's Cliff this afternoon for wild flowers. Will you oblige us by making one of our little party? If so, we will call for you at two o'clock. Do go.

*Yours affectionately,
Belle.*

Please answer by bearer.

My dear Sir,

If you can come next Sunday, we shall be equally glad to see you, but do not trust to any of Martin's appointments in futures. Leg of lamb as before, at half-past four, and the heart of Lamb for ever.

*Yours truly,
C. Lamb.*

30th March, 1893.

A MODEL INVITATION.

1. This model is printed in common script type in order to illustrate the best style of engraved billets.
2. These invitations should always be printed in script type and never written except by a skillful penman.
3. Wedding invitations are issued ten days or more before the ceremony.
4. If an answer is expected "The favor of an answer is requested," or the letters R. S. V. P. should be written or printed on the bottom.

Mr. & Mrs. Wm. Radley

*request your presence
at the marriage of their daughter*

Elizabeth

to

Dr. W. H. Simpson,

*on Friday Morning, January sixth,
at ten o'clock.*

St. Bartholomew's Church.

Reception

*from half-past ten till one,
at 814 Irving Place.*

Model 2.—Ceremony.

Mrs. Mary H. Collins

*requests the pleasure of your company at the marriage
ceremony of her daughter*

Alice C. Cass

to

Thomas W. Clark,

on Tuesday afternoon, May sixteenth, 1893, at four o'clock.

Waverly Terrace.

Baltimore.

Enclosing a reception card as follows:—

Reception

*On Monday, May twenty-second,
day and evening.*

Or, "Mr. and Mrs. Henry J. Clark at home at a certain time and place.

Model 3.—Ceremony and Reception.

CEREMONY,

*First Congregational Church, Earlville Ills.,
on Tuesday, May sixteenth, at ten o'clock.*

✻ AT HOME, ✻

*Tuesdays and Fridays in June,
at the residence of Dr. Charles C. Porter,
Seymour Avenue.*

LEROY MATHER.

ANNA J. WILLIAMS.



MY DAUGHTER, REMEMBER, YOUR MANNERS SPEAK
LOUDER THAN WORDS."

Hints and Helps on Good Behavior at all Times and at all Places.

1. It takes acquaintance to found a noble esteem, but politeness prepares the way. Indeed, as Montaigne says, Courtesy begets esteem at sight. Urbanity is half of affability, and affability is a charm worth possessing.

2. A pleasing demeanor is often the scales by which the pagan weighs the Christian. It is not virtue, but virtue inspires it. There are circumstances in which it takes a great and strong soul to pass under the little yoke of courtesy, but it is a passport to a greater soul standard.

3. Matthew Arnold says, "Conduct is three-fourths of character," and Christian benignity draws the line for conduct. A high sense of rectitude, a lowly soul, with a pure and kind

heart are elements of nobility which will work out in the life of a human being at home—everywhere. “Private refinement makes public gentility.”

4. If you would conciliate the favor of men, rule your resentment. Remember that if you permit revenge or malice to occupy your soul, you are ruined.

5. Cultivate a happy temper; banish the blues; a cheerful, sanguine spirit begets cheer and hope.

6. Be trustworthy and be trustful.

7. Do not place a light estimate upon the arts of good reading and good expression; they will yield perpetual interest.

8. Study to keep versed in world events as well as in local occurrences, but abhor gossip, and above all scandal.

9. Banish a self-conscience spirit—the source of much awkwardness—with a constant aim to make others happy. Remember that it is incumbent upon gentlemen and ladies alike to be neat in habits.

10. The following is said to be a correct posture for walking: Head erect — not too rigid — chin in, shoulders back. Permit no unnecessary motion about the thighs. Do not lean over to one side in walking, standing or sitting; the practice is not only ungraceful, but it is deforming and therefore unhealthful.

11. Beware of affectation and of Beau Brummel airs.

12. If the hands are allowed to swing in walking, they should be limited, and the lady will manage them much more gracefully, if they almost touch the clothing.

13. A lady should not stand with her hands behind her. We could almost say, forget the hands except to keep them clean, including the nails, cordial and helpful. One hand may rest easily in the other. Study repose of attitude here as well as in the rest of the body.

14. Gestures are for emphasis in public speaking; do not point elsewhere, as a rule.

15. Greet your acquaintances as you meet them with a slight bow and smile, as you speak.

16. Look the person to whom you speak in the eye. Never under any circumstances wink at another or communicate by furtive looks.

17. Should you chance to be the rejected suitor of a lady, bear in mind your own self-respect, as well as the inexorable laws

of society, and bow politely when you meet her. Reflect that you do not stand before all woman-kind as you do at her bar. Do not resent the bitterness of flirtation. No lady or gentleman will flirt. Remember ever that painful prediscovery is better than later disappointment. Let such experience spur you to higher exertion.

18. Discretion should be exercised in introducing persons. Of two gentlemen who are introduced, if one is superior in rank or age, he is the one to whom the introduction should be made. Of two social equals, if one be a stranger in the place, his name should be mentioned first.

19. In general the simpler the introduction the better.

20. Before introducing a gentleman to a lady, remember that she is entitled to hold you responsible for the acquaintance. The lady is the one to whom the gentleman is presented, which may be done thus: "Miss A, permit me to introduce to you my friend, Mr. B."; or, "Miss A., allow me to introduce Mr. B." If mutual and near friends of yours, say simply, "Miss A., Mr. B."

21. Receive the introduction with a slight bow and the acknowledgment, "Miss A., I am happy to make your acquaintance"; or, "Mr. B., I am pleased to meet you." There is no reason why such stereotyped expressions should always be used, but something similar is expected. Do not extend the hand usually.

22. A true lady will avoid familiarity in her deportment towards gentlemen. A young lady should not permit her gentlemen friends to address her by her home name, and the reverse is true. Use the title Miss and Mr. respectively.

23. Ladies should be frank and cordial towards their lady friends, but never gushing.

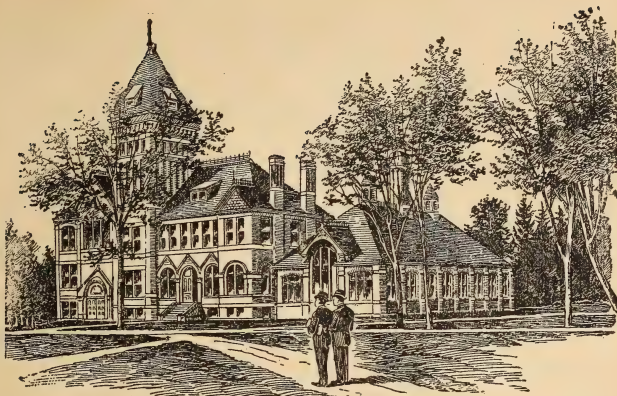
24. Should you meet a friend twice or oftener, at short intervals, it is polite to bow slightly each time after the first.

25. A lady on meeting a gentleman with whom she has slight acquaintance will make a medium bow — neither too decided nor too slight or stiff.

26. For a gentleman to take a young lady's arm, is to intimate that she is feeble, and young ladies resent the mode.

27. If a young lady desires to visit any public place where she expects to meet a gentleman acquaintance, she should have a chaperon to accompany her. a person of mature years when possible, and never a giddy girl.

28. A lady should not ask a gentleman to walk with her.



A COMPLETE ETIQUETTE IN A FEW PRACTICAL RULES.

1. *If you desire to be respected, keep clean. The finest attire and decorations will add nothing to the appearance or beauty of an untidy person.*

2. *Clean clothing, clean skin, clean hands, including the nails, and clean, white teeth, are a requisite passport for good society.*

3. *A bad breath should be carefully remedied, whether it proceeds from the stomach or from decayed teeth.*

4. *To pick the nose, finger about the ears, or scratch the head or any other part of the person, in company, is decidedly vulgar.*

5. *When you call at any private residence, do not neglect to clean your shoes thoroughly.*

6. *A gentleman should always remove his hat in the presence of ladies, except out of doors, and then he should lift or touch his hat in salutation. On meeting a lady a well-bred gentleman will always lift his hat.*

7. *An invitation to a lecture, concert, or other entertainment, may be either verbal or written, but should always be made at least twenty-four hours before the time.*

8. *On entering a hall or church the gentleman should precede the lady in walking up the aisle, or walk by her side, if the aisle is broad enough.*

9. *A gentleman should always precede a lady upstairs, and follow her downstairs.*

10. *Visitors should always observe the customs of the church with reference to standing, sitting, or kneeling during the services.*

11. *On leaving a hall or church at the close of entertainment or services, the gentleman should precede the lady.*

12. *A gentleman walking with a lady should carry the parcels, and never allow the lady to be burdened with anything of the kind.*

13. *A gentleman meeting a lady on the street and wishing to speak to her, should never detain her, but may turn around and walk in the same direction she is going, until the conversation is completed.*

14. *If a lady is traveling with a gentleman, simply as a friend, she should place the amount of her expenses in his hands, or insist on paying the bills herself.*

15. *Never offer a lady costly gifts, unless you are engaged to her, for it looks as if you were trying to purchase her goodwill; and when you make a present to a lady use no ceremony whatever.*

16. *Never carry on a private conversation in company. If secrecy is necessary, withdraw from the company.*

17. *Never sit with your back to another without asking to be excused.*

18. *It is as unbecoming for a gentleman to sit with legs crossed as it is for a lady.*

19. *Never thrum with your fingers, rub your hands, yawn or sigh aloud in company.*

20. *Loud laughter, loud talking, or other boisterous manifestations should be checked in the society of others, especially on the street and in public places.*

21. *When you are asked to sing or play in company, do so without being urged, or refuse in a way that shall be final; and when music is being rendered in company, show politeness to the musician by giving attention. It is very impolite to keep up a conversation. If you do not enjoy the music, keep silent.*

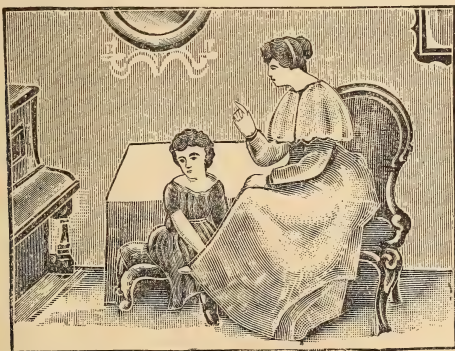
22. *Contentions, contradictions, etc. in society should be carefully avoided.*

23. *Pulling out your watch in company, unless asked the time of day, is a mark of the demi-bred. It looks as if you were tired of the company and the time dragged heavily.*

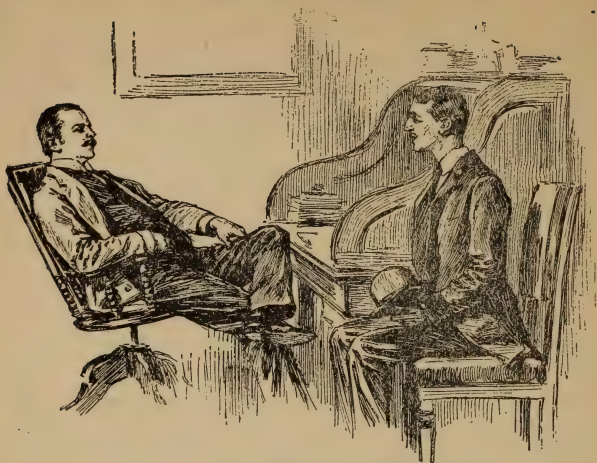
24. *You should never decline to be introduced to any one or all of the guests present at a party to which you have been invited.*

25. *A gentleman who escorts a lady to a party, or who has a lady placed under his care, is under particular obligations to attend to her wants and see that she has proper attention. He should introduce her to others, and endeavor to make the evening pleasant. He should escort her to the supper table and provide for her wants.*

26. *To take small children or dogs with you on a visit of ceremony is altogether vulgar, though in visiting familiar friends children are not objectionable.*



Children should early be taught the lesson of Propriety and Good Manners.



GIVING A YOUNG MAN GOOD ADVICE.

GOOD ADVICE ON CONDUCT BY GREAT AUTHORS.

“Manners are the ornaments of action.”—*Smiles.*

It is always easy to say a rude thing, but never wise.—*Stacy.*

Guard the manners if you would protect the morals.—*Davidson.*

Good temper is the essence of good manners.—*Anonymous.*

He that has no character is not a man: he is only a thing:—*Chamfort.*

Sow good services; sweet remembrances will grow from them.—*Mme. De Stael.*

Good manners are the shadows of virtue, if not virtues themselves.—*Anonymous.*

In all professions and occupations, good manners are necessary to success.—*Mrs. Ward.*

Good manners is the art of making easy the persons with whom we are brought in contact.—*Anonymous.*

If you speak the sense of an angel in bad words, and with a disagreeable utterance, nobody will hear you twice who can help it.—*Chesterfield.*

It is a great misfortune not to have enough wit to speak well, or not enough judgment to keep silent.—*La Bruyere*.

One of the most effectual ways of pleasing and of making one's self loved is to be cheerful; Joy softens more hearts than tears.—*Mme. De Sartory*.

To live with our enemies as if they may some time become our friends, and to live with our friends as if they may sometime become our enemies, is not a moral but a political maxim.—*Anonymous*.

Men's evil manners live in brass; their virtues we write in water.—*Shakespeare*.

To be more dear, congenial to my heart,
One native Charm, than all the gloss of art.—*Goldsmith*.

Honor and shame from no condition rise;
Act well your part, there all the honor lies.—*Pope*.

Loveliness needs not the foreign aid of ornament,
But is, when unadorned, adorned the most.—*Thompson*.

ETIQUETTE OF CALLS.

In the matter of making calls it is the correct thing:

For the caller who arrived first to leave first.

To return a first call within a week and in person.

To call promptly and in person after a first invitation.

For the mother or chaperon to invite a gentleman to call.

To call within a week after any entertainment to which one has been invited.

You should call upon an acquaintance who has recently returned from a prolonged absence.

It is proper to make the first call upon people in a higher social position, if one is asked to do so.

It is proper to call, after an engagement has been announced, or a marriage has taken place, in the family.

For the older residents in the city or street to call upon the newcomers to their neighborhood is a long recognized custom.

It is proper, after a removal from one part of the city to another, to send out cards with one's new address upon them.

To ascertain what are the prescribed hours for calling in the place where one is living, or making a visit, and to adhere to those hours is a duty that must not be overlooked.

A gentleman should ask for the lady of the house as well as the young ladies, and leave cards for her as well as for the head of the family.



Improve Your Speech by Reading.

ETIQUETTE IN YOUR SPEECH.

- Don't say Miss or Mister without the person's name.
- Don't say pants for trousers.
- Don't say gents for gentlemen.
- Don't say female for woman.
- Don't say elegant to mean everything that pleases you.
- Don't say genteel for well-bred.
- Don't say ain't for isn't.
- Don't say I done it for I did it.
- Don't say he is older than me; say older than I.
- Don't say she does not see any; say she does not see at all.
- Don't say not as I know; say not that I know.
- Don't say he calculates to get off; say he expects to get off.
- Don't say he don't; say he doesn't.
- Don't say she is some better; say she is somewhat better.
- Don't say where are you stopping? say where are you staying?
- Don't say you was; say you were.
- Don't say I say, says I, but simply say I said.
- Don't sign your letters yours etc., but yours truly.
- Don't say lay for lie; lay expresses action; lie expresses rest.
- Don't say them bonnets; say those bonnets.
- Don't say party for person.
- Don't say it looks beautifully, but say it looks beautiful.

Don't say feller, winder, to-morrer, for fellow, window, to-morrow.

Don't use slangy words; they are vulgar.

Don't use profane words; they are sinful and foolish.

Don't say it was her, when you mean it was she.

Don't say not at once for at once.

Don't say he gave me a recommend, but say he gave me a recommendation.

Don't say the two first for the first two.

Don't say he learnt me French; say he taught me French.

Don't say lit the fire; say lighted the fire.

Don't say the man which you saw; say the man whom you saw.

Don't say who done it; say who did it.

Don't say if I was rich I would buy a carriage; say if I were rich.

Don't say if I am not mistaken you are in the wrong; say if I mistake not.

Don't say who may you be; say who are you?

Don't say go lay down; say go lie down.

Don't say he is taller than me; say taller than I.

Don't say I shall call upon him; say I shall call on him.

Don't say I bought a new pair of shoes; say I bought a pair of new shoes.

Don't say I had rather not; say I would rather not.

Don't say two spoonsful; say two spoonfuls.

ETIQUETTE OF DRESS AND HABITS.

Don't let one day pass without a thorough cleansing of your person.

Don't sit down to your evening meal before a complete toilet if you have company.

Don't cleanse your nails, your nose, or your ears in public.

Don't use hair dye, hair oil or pomades.

Don't wear evening dress in daytime.

Don't wear jewelry of a gaudy character; genuine jewelry modestly worn is not out of place.

Don't overdress yourself or walk affectedly.

Don't wear slippers or dressing-gown or smoking-jacket out of your own house.

Don't sink your hands in your trousers' pockets.

Don't whistle in public places, nor inside of houses either.

Don't use your fingers or fists to beat a tattoo upon floor, desk or window panes.

Don't examine other people's papers or letters scattered on their desk.

Don't bring a smell of spirits or tobacco into the presence of ladies.

Never use either in the presence of ladies.

Don't drink spirits; millions have tried it to their sorrow.

ETIQUETTE ON THE STREET.

1. Your conduct on the street should always be modest and dignified. Ladies should carefully avoid all loud and boisterous conversation or laughter and all undue liveliness in public.

2. When walking on the street do not permit yourself to be absent-minded, as to fail to recognize a friend; do not go along reading a book or newspaper.

3. In walking with a lady on the street give her the inner side of the walk, unless the outside is the safer part; in which case she is entitled to it.

4. Your arm should not be given to any lady except your wife or a near relative, or a very old lady, during the day, unless her comfort or safety requires it. At night the arm should always be offered; also in ascending the steps of a public building.

5. In crossing the street a lady should gracefully raise her dress a little above her ankle with one hand. To raise the dress with both hands is vulgar, except in places where the mud is very deep.

6. A gentleman meeting a lady acquaintance on the street should not presume to join her in her walk without first asking her permission.

7. If you have anything to say to a lady whom you may happen to meet in the street, however intimate you may be, do not stop her, but turn round and walk in company with her; you can take leave at the end of the street.

8. A lady should not venture out upon the street alone after dark. By so doing she compromises her dignity, and exposes herself to indignity at the hands of the rougher class.

9. Never offer to shake hands with a lady in the street if you have on dark or soiled gloves, as you may soil hers.

10. A lady does not form acquaintances upon the street, or seek to attract the attention of the other sex or of persons of her own sex. Her conduct is always modest and unassuming. Neither does a lady demand services or favors from a gentleman. She accepts them graciously, always

expressing her thanks. A gentleman will not stand on the street corners, or in hotel doorways, or store windows and gaze impertinently at ladies as they pass by. This is the exclusive business of loafers.

11. In walking with a lady who has your arm, should you have to cross the street, do not disengage your arm and go around upon the outside, unless the lady's comfort renders it necessary. In walking with a lady, where it is necessary for you to proceed singly, always go before her.

ETIQUETTE BETWEEN SEXES.

1. A lady should be a lady, and a gentleman a gentleman under any and all circumstances.

2. **Female Indifference to Man.**—There is nothing that affects the nature and pleasure of man so much as a proper and friendly recognition from a lady, and as women are more or less dependent upon man's good-will, either for gain or pleasure, it surely stands to their interest to be reasonably pleasant and courteous in his presence or society. Indifference is always a poor investment, whether in society or business.

3. **Gallantry and Ladyism** should be a prominent feature in the education of young people. Politeness to ladies cultivates the intellect and refines the soul, and he who can be easy and entertaining in the society of ladies has mastered one of the greatest accomplishments. There is nothing taught in school, academy or college, that contributes so much to the happiness of man as a full development of his social and moral qualities.

4. **Ladylike Etiquette.**—No woman can afford to treat men rudely. A lady must have a high intellectual and moral ideal and hold herself above reproach. She must remember that the art of pleasing and entertaining gentlemen is infinitely more ornamental than laces, ribbons or diamonds. Dress and glitter may please man, but it will never benefit him.

5. **Cultivate Deficiencies.**—Men and women poorly sexed treat each other with more or less indifference, whereas a hearty sexuality inspires both to a right estimation of the faculties and qualities of each other. Those who are deficient should seek society and overcome their deficiencies. While some naturally inherit faculties as entertainers, others are compelled to acquire them by cultivation.



ASKING AN HONEST QUESTION.

6. **Ladies' Society.**—He who seeks ladies' society should seek an education and should have a pure heart and a pure mind. Read good, pure and wholesome literature and study human nature, and you will always be a favorite in the society circle.

7. **Woman Haters.**—Some men with little refinement and strong sensual feelings virtually insult and thereby disgust and repel every female they meet. They look upon woman with an inherent vulgarity, and doubt the virtue and integrity of all alike. But it is because they are generally insin-

cere and impure themselves, and with such a nature culture and refinement are out of the question, there must be a revolution.

8. **Men Haters.**—Women who look upon all men as odious, corrupt or hateful, are no doubt so themselves, though they may be clad in silk and sparkle with diamonds and be as pretty as a lily; but their hypocrisy will out, and they can never win the heart of a faithful, conscientious and well balanced man. A good woman has broad ideas and great sympathy. She respects all men until they are proven unworthy.

9. **Fond of Children.**—The man who is naturally fond of children will make a good husband and a good father. So it behooves the young man, to notice children and cultivate the art of pleasing them. It will be a source of interest, education and permanent benefit to all.

10. **Excessive Luxury.**—Although the association with ladies is an expensive luxury, yet it is not an expensive education. It elevates, refines, sanctifies and purifies, and improves the whole man. A young man who has a pure and genuine respect for ladies, will not only make a good husband, but a good citizen as well.

11. **Masculine Attention.**—No woman is entitled to any more attention than her loveliness and ladylike conduct will command. Those who are most pleasing will receive the most attention, and those who desire more should aspire to acquire more by cultivating those graces and virtues which ennoble woman, but no lady should lower or distort her own true ideal, or smother and crucify her conscience, in order to please any living man. A good man will admire a good woman, and deceptions cannot long be concealed. Her show of dry goods or glitter of jewels cannot long cover up her imperfections or deceptions.

12. **Purity.**—Purity of purpose will solve all social problems. Let all stand on this exalted sexual platform, and teach every man just how to treat the female sex, and every woman how to behave towards the masculine; and it will incomparably adorn the manners of both, make both happy in each other, and mutually develop each other's sexuality and humanity.





Practical Rules on Table Manners.

1. Help ladies with a due appreciation ; do not overload the plate of any person you serve. Never pour gravy on a plate without permission. It spoils the meat for some persons.

2. Never put anything by force upon any one's plate. It is extremely ill-bred, though extremely common, to press one to eat of anything.

3. If at dinner you are requested to help any one to sauce or gravy, do not pour it over the meat or vegetables, but on one side of them. Never load down a person's plate with anything.

4. As soon as you are helped, begin to eat, or at least begin to occupy yourself with what you have before you. Do not wait till your neighbors are served — a custom that was long ago abandoned.

5. Should you, however, find yourself at a table where they have the old-fashioned steel forks, eat with your knife, as the others do, and do not let it be seen that you have any objection to doing so.

6. Bread should be broken. To butter a large piece of bread and then bite it, as children do, is something the knowing never do.

7. In eating game or poultry do not touch the bones with your fingers. To take a bone in the fingers for the purpose of picking it, is looked upon as being very inelegant.

8. Never use your own knife or fork to help another. Use rather the knife or fork of the person you help.

9. Never send your knife and fork, or either of them, on your plate when you send for a second supply.

10. Never turn your elbows out when you use your knife and fork. Keep them close to your sides.

11. Whenever you use your fingers to convey anything to your mouth or to remove any thing from the mouth, let it be the fingers of the left hand.

12. Tea, coffee, chocolate and the like are drank from the cup and never from the saucer.

13. In masticating your food, keep your mouth shut; otherwise you will make a noise that will be very offensive to those around you.

14. Don't attempt to talk with a full mouth. One thing at a time is as much as any man can do well.

15. Should you find a worm or insect in your food, say nothing about it.

16. If a dish is distasteful to you, decline it, and without comment.

17. Never put bones or pits of fruit on the table-cloth. Put them on the side of your plate.

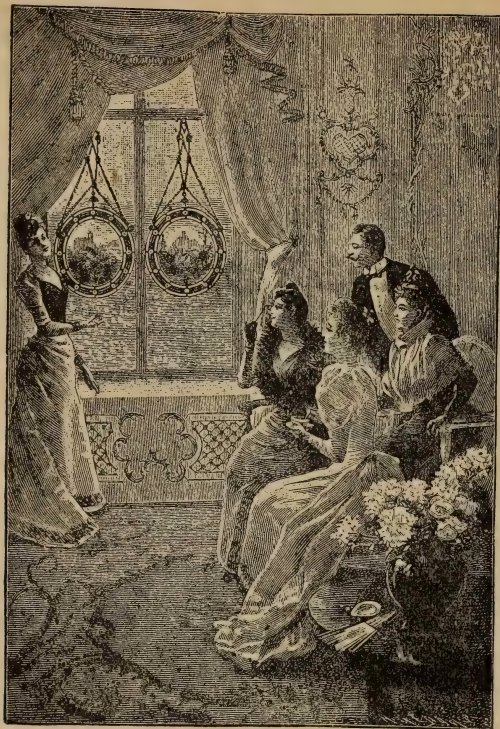
18. Do not hesitate to take the last piece on a dish, simply because it is the last. To do so is to directly express the fear that you would exhaust the supply.

19. If you would be, what you would like to be — abroad, take care that you *are* what you would like to be — at home.

20. Avoid picking your teeth at the table if possible; but if you must, do it, if you can, where you are not observed.

21. If an accident of any kind soever should occur during dinner, the cause being who or what it may, you should not seem to note it.

22. Should you be so unfortunate as to overturn or to break anything, you would make no apology. You might let your regret appear in your face, but it would not be proper to put it in words.



Giving a Parlor Recitation.

Social Duties.

Man in Society is like a flow'r,
Blown in its native bed. 'Tis there alone
His faculties expanded in full bloom
Shine out, there only reach their proper use.—COWPER.

The primal duties shine aloft like stars:
The charities that soothe, and heal, and bless,
Are scatter'd at the feet of man like flowers.
—WORDSWORTH.

1. Membership in Society.—Many fail to get hold of the idea that they are members of society. They seem to suppose that the social machinery of the world is self-operating. They cast their first ballot with an emotion of pride, perhaps, but are sure to pay their first tax with a groan. They see political organizations in active existence; the parish, and the church, and other important bodies that embrace in some form of society all men, are successfully operated; and yet these young men have no part or lot in the matter. They do not think of giving a day's time to society.

2. Begin Early.—One of the first things a young man should do is to see that he is acting his part in society. The earlier this is begun the better. I think that the opponents of secret societies in colleges have failed to estimate the benefit which it must be to every member to be obliged to contribute to the support of his particular organization, and to assume personal care and responsibility as a member. If these societies have a tendency to teach the lessons of which I speak, they are a blessed thing.

3. Do Your Part.—Do your part, and be a man among men. Assume your portion of social responsibility, and see that you discharge it well. If you do not do this, then you are mean, and society has the right to despise you just as much as it chooses to do so. You are, to use a word more emphatic than agreeable, a sneak, and have not a claim upon your neighbors for a single polite word.

4. A Whining Complainer.—Society, as it is called, is far more apt to pay its dues to the individual than the individual to society. Have you, young man, who are at home whining over the fact that you cannot get into society, done anything to give you a claim to social recognition? Are you able to make any return for social recognition and social privileges? Do you know anything? What kind of coin do you propose to pay in the discharge of the obligation which comes upon you with social recognition? In other words, as a return for what you wish to have society do for you, what can you do for society? This is a very important question—more important to you than to society. The question is, whether you will be a member of society by right, or by courtesy. If you have so mean a spirit as to be content to be a beneficiary of society—to receive favors and to confer none—you have no business in the society to which you aspire. You are an exacting, conceited fellow.

5. What Are You Good For?—Are you a good beau, and are you willing to make yourself useful in waiting on the

ladies on all occasions? Have you a good set of teeth, which you are willing to show whenever the wit of the company gets off a good thing? Are you a true, straightforward, manly fellow, with whose healthful and uncorrupted nature it is good for society to come in contact? In short, do you possess anything of any social value? If you do, and are willing to impart it, society will yield itself to your touch. If you have nothing, then society, as such, owes you nothing. Christian philanthropy may put its arm around you, as a lonely young man, about to spoil for want of something, but it is very sad and humiliating for a young man to be brought to that. There are people who devote themselves to nursing young men, and doing them good. If they invite you to tea, go by all means, and try your hand. If, in the course of the evening, you can prove to them that your society is desirable, you have won a point. Don't be patronized.

6. The Morbid Condition.—Young men, you are apt to get into a morbid state of mind, which declines them to social intercourse. They become devoted to business with such exclusiveness, that all social intercourse is irksome. They go out to tea as if they were going to jail, and drag themselves to a party as to an execution. This disposition is thoroughly morbid, and to be overcome by going where you are invited, always, and with a sacrifice of feeling.

7. The Common Blunder.—Don't shrink from contact with anything but bad morals. Men who affect your unhealthy minds with antipathy, will prove themselves very frequently to be your best friends and most delightful companions. Because a man seems uncongenial to you, who are squeamish and foolish, you have no right to shun him. We become charitable by knowing men. We learn to love those whom we have despised by rubbing against them. Do you not remember some instance of meeting a man or woman whom you had never previously known or cared to know—an individual, perhaps, against whom you have entertained the strongest prejudices—but to whom you became bound by a lifelong friendship through the influence of a three days' intercourse? Yet, if you had not thus met, you would have carried through life the idea that it would be impossible for you to give your fellowship to such an individual.

8. The Foolishness of Man.—God has introduced into human character infinite variety, and for you to say that you do not love and will not associate with a man because he is unlike you, is not only foolish but wrong. You are to remember that in the precise manner and degree in which

a man differs from you, do you differ from him; and that from his standpoint you are naturally as repulsive to him, as he, from your standpoint, is to you. So, leave all this talk of congeniality to silly girls and transcendental dreamers.

9. Do Business in Your Way and Be Honest.—Do your business in your own way, and concede to every man the privilege which you claim for yourself. The more you mix with men, the less you will be disposed to quarrel, and the more charitable and liberal will you become. The fact that you do not understand a man, is quite as likely to be our fault as his. There are a good many chances in favor of the conclusion that, if you fail to like an individual whose acquaintance you make it is through your own ignorance and illiberality. So I say, meet every man honestly; seek to know him; and you will find that in those points in which he differs from you rests his power to instruct you, enlarge you, and do you good. Keep your heart open for everybody, and be sure that you shall have your reward. You shall find a jewel under the most uncouth exterior; and associated with homeliest manners and oddest ways and ugliest faces, you will find rare virtues, fragrant little humanities, and inspiring heroisms.

10. Without Society, Without Influence.—Again: you can have no influence unless you are social. An unsocial man is as devoid of influence as an ice-peak is of verdure. It is through social contact and absolute social value alone that you can accomplish any great social good. It is through the invisible lines which you are able to attach to the minds with which you are brought into association alone that you can tow society, with its deeply freighted interests, to the great haven of your hope.

11. The Revenge of Society.—The revenge which society takes upon the man who isolates himself, is as terrible as it is inevitable. The pride which sits alone will have the privilege of sitting alone in its sublime disgust till it drops into the grave. The world sweeps by the man, carelessly, remorselessly, contemptuously. He has no hold upon society, because he is no part of it.

12. The Conclusion of the Whole Matter.—You cannot move men until you are one of them. They will not follow you until they have heard your voice, shaken your hand, and fully learned your principles and your sympathies. It makes no difference how much you know, or how much you are capable of doing. You may pile accomplishment upon acquisition mountain high; but if you fail to be a social man, demonstrating to society that your lot is with the rest, a

little child with a song in its mouth, and a kiss for all and a pair of innocent hands to lay upon the knees, shall lead more hearts and change the direction of more lives than you.



Gathering Oranges in the Sunny South.

Politeness.

1. **Beautiful Behavior.**—Politeness has been described as the art of showing, by external signs, the internal regard we have for others. But one may be perfectly polite to another without necessarily paying a special regard for him. Good manners are neither more nor less than beautiful behavior. It has been well said that "a beautiful form is better than a beautiful face, and a beautiful behavior is better than a beautiful form; it gives a higher pleasure than statues or pictures—it is the finest of the fine arts."

2. **True Politeness.**—The truest politeness comes of sincerity. It must be the outcome of the heart, or it will make no lasting impression; for no amount of polish can dispense with truthfulness. The natural character must be allowed to appear, freed of its angularities and asperities. Though politeness, in its best form, should resemble water—"best when clearest, most simple, and without taste"—yet genius in a man will always cover many defects of manner, and much will be excused to the strong and the original. Without genuineness and individuality, human life would lose much of its interest and variety, as well as its manliness and robustness of character.

3. **Personality of Others.**—True politeness especially exhibits itself in regard for the personality of others. A man will respect the individuality of another if he wishes to be respected himself. He will have due regard for his views and opinions, even though they differ from his own. The well-mannered man pays a compliment to another, and sometimes even secures his respect by patiently listening to him. He is simply tolerant and forbearant, and refrains from judging harshly; and harsh judgments of others will almost invariably provoke harsh judgments of ourselves.

4. **The Impolite.**—The impolite, impulsive man will, however, sometimes rather lose his friend than his joke. He may surely be pronounced a very foolish person who secures another's hatred at the price of a moment's gratification. It was a saying of Burnel, the engineer—himself one of the kindest-natured of men—that "spite and ill-nature are among the most expensive luxuries in life." Dr. Johnson once said: "Sir, a man has no more right to say a rude thing to another than to knock him down."

5. **Feelings of Others.**—Want of respect for the feelings of others usually originates in selfishness, and issues in

hardness and repulsiveness of manner. It may not proceed from malignity so much, as from want of sympathy, and want of delicacy—a want of that perception of, and attention to, those little and apparently trifling things, by which pleasure is given or pain occasioned to others. Indeed, it may be said that in self-sacrifice in the ordinary intercourse of life, mainly consists the difference between being well and ill bred. Without some degree of self-restraint in society a man may be found almost insufferable. No one has pleasure in holding intercourse with such a person, and he is a constant source of annoyance to those about him.

6. Disregard of Others.—Men may show their disregard to others in various impolite ways, as, for instance, by neglect of propriety in dress, by the absence of cleanliness, or by indulging in repulsive habits. The slovenly, dirty person, by rendering himself physically disagreeable, sets the tastes and feelings of others at defiance, and is rude and uncivil, only under another form.

7. The Best School of Politeness.—The first and best school of politeness, as of character, is always the home, where woman is the teacher. The manners of society at large are but the reflex of the manners of our collective homes, neither better nor worse. Yet, with all the disadvantages of ungenial homes, men may practice self-culture of manner as of intellect, and learn by good examples to cultivate a graceful and agreeable behavior towards others. Most men are like so many gems in the rough, which need polishing by contact with other and better natures, to bring out their full beauty and lustre. Some have but one side polished, sufficient only to show the delicate graining of the interior; but to bring out the full qualities of the gem, needs the discipline of experience, and contact with the best examples of character in the intercourse of daily life.

8. Captiousness of Manner.—While captiousness of manner, and the habit of disputing and contradicting every thing said, is chilling and repulsive, the opposite habit of assenting to, and sympathizing with, every statement made, or emotion expressed, is almost equally disagreeable. It is unmanly, and is felt to be dishonest. "It may seem difficult," says Richard Sharp, "to steer always between bluntness and plain dealing, between merited praises and lavishing indiscriminate flattery; but it is very easy—good humor, kindheartedness, and perfect simplicity, being all that are requisite to do what is right in the right way." At the same time many are impolite, not because they mean to be so, but because they are awkward, and perhaps know no better.

9. **Shy People.**—Again many persons are thought to be stiff, reserved, and proud, when they are only shy. Shyness is characteristic of most people of the Teutonic race. From all that can be learned of Shakespeare, it is to be inferred that he was an exceedingly shy man. The manner in which his plays were sent into the world—for it is not known that he edited or authorized the publication of a single one of them,—and the dates at which they respectively appeared, are mere matters of conjecture.

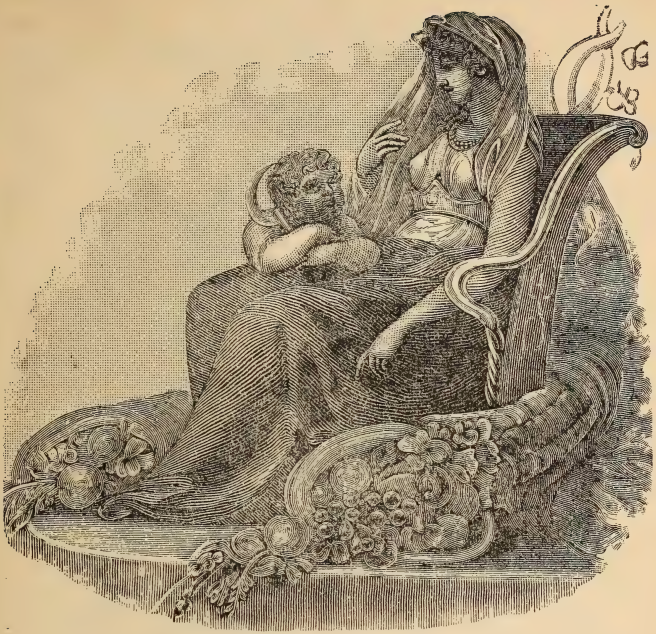
10. **Self-Forgetfulness.**—True politeness is best evinced by self-forgetfulness, or self-denial in the interest of others. Mr. Garfield, our martyred president, was a gentleman of royal type. His friend, Col. Rockwell, says of him: "In the midst of his suffering he never forgets others. For instance, to-day he said to me, 'Rockwell, there is a poor soldier's widow who came to me before this thing occurred, and I promised her, she should be provided for. I want you to see that the matter is attended to at once.' He is the most docile patient I ever saw."

11. **Its Bright Side.**—We have thus far spoken of shyness as a defect. But there is another way of looking at it; for even shyness has its bright side, and contains an element of good. Shy men and shy races are ungraceful and undemonstrative, because, as regards society at large, they are comparatively unsociable. They do not possess those elegances of manner acquired by free intercourse, which distinguish the social races, because their tendency is to shun society rather than to seek it. They are shy in the presence of strangers, and shy even in their own families. They hide their affections under a robe of reserve, and when they do give way to their feelings, it is only in some very hidden inner chamber. And yet, the feelings are there, and not the less healthy and genuine, though they are not made the subject of exhibition to others.

12. **Worthy of Cultivation.**—While, therefore, grace of manner, politeness of behavior, elegance of demeanor, and all the arts that contribute to make life pleasant and beautiful, are worthy of cultivation, it must not be at the expense of the more solid and enduring qualities of honesty, sincerity, and truthfulness. The fountain of beauty must be in the heart more than in the eye, and if it does not tend to produce beautiful life and noble practice, it will prove of comparatively little avail. Politeness of manner is not worth much, unless it is accompanied by polite actions.







A COMPLETE
CYCLOPEDIA
—OF—
Family Receipts.





ALL KINDS OF FAMILY RECEIPTS AND REMEDIES.

A SURE CURE FOR CAR SICKNESS.

Take a sheet of writing-paper large enough to cover both the chest and stomach, and put it on under the clothing, next to the person. If one sheet is not large enough paste the edges of two or three together, for the chest and stomach must be well covered. Wear the paper thus as long as you are traveling, and change it every day if your journey is a long one. Those who have tried it say that it is a perfect defense.

A HEALTHY SPRUCE BEER.

$\frac{1}{2}$ pint essence of spruce,
4 ounces bruised pimento,
4 ounces ginger,
3 gallons water.

Boil 5 or 10 minutes, then strain, and add 11 gallons of warm water, a pint of yeast, and 6 pints of molasses. Allow the mixture to ferment for 24 hours.



REMEDY FOR NEURALGIA.

Hypophosphite of soda, taken in 1 drachm doses 3 times per day in beef tea, is a good remedy for this painful affection. So is the application of bruised horse-radish, or the application of oil of peppermint applied lightly with a camel-hair pencil.

BURNS.

A soothing application for burns is to cover them with the white of an egg. This forms a coating over the injured flesh and protects it from the air.

Wild Cherry Bitters, for Colds and Coughs.

Boil a pound of wild cherry bark in a quart of water till reduced to a pint. Sweeten; add 2 ounces rum to preserve, or, if to be used immediately, omit the rum. Dose, 3 table-spoonfuls 3 times a day.

TO KEEP FLOWERS FRESH.

To keep flowers fresh exclude them from the air. To do this, wet them thoroughly, put in a damp box, and cover with wet raw cotton or newspaper, then place in a cool spot. To preserve bouquets, put a little saltpetre in the water you use in your vases, and the flowers will live for a fortnight.



HOW TO GET RID OF RATS.

1. Common steel traps set in their holes or runways covered up with chaff or crushed dried leaves, will soon exterminate rats, or drive them from the premises.

2. To place the steel traps in pans of wheat-bran is a good device. After catching two or three rats in the same pan, leave out the trap a few nights, and then replace it.

3. Raw meat sprinkled with strychnine nailed to a small board, and placed as above, generally answers the purpose, unless the rats are very cunning, having been trapped and poisoned considerably.

HOW TO POISON RATS.

1 qt. warm water, 2 lbs. lard, 1 oz. phosphorus.

Mix and thicken with flour; to be spread on bread and covered with sugar.

N. B. Most of these patent preparations, such as "Rough on Rats," etc., for the extermination of rats and mice, are of little benefit. If they could be used when first prepared, they would be much more effective; but they are often kept in stores for months and years, and thereby lose all their strength.



*HOW TO KILL BURDOCK, YELLOW BURDOCK,
BULL THISTLES, AND OTHER LARGE
NOXIOUS WEEDS.*

It is very difficult to dig up these weeds, owing to their lengthy roots, and if they grow in a yard or garden it is not a good plan to spade the earth to such a depth, or to destroy the green sod in a front yard.

REMEDY.—Allow them to grow until they are nearly ready to blossom. Then cut them off close to the ground with a hoe or spade and after two days pour a little kerosene oil on the root, and no further treatment will be necessary for its destruction.

WHALEBONE.

Bent whalebones may be restored to shape by soaking in warm water a few hours, or by warming over a lamp or fire.

HOW TO MAKE GRAFTING WAX.

One pound white resin, $\frac{1}{4}$ pound beeswax, linseed oil sufficient to make good chewing gum. While heating, test it by cooling, in order not to get it too thick. Care should be taken that it does not break when cooled.

CHEAP ICE CREAM.

6 quarts milk,
 $\frac{1}{2}$ pound corn starch.

First dissolve the starch in 1 quart of the milk, and then mix all together and just simmer a little (not to boil). Sweeten and flavor to suit your taste.

HOW TO TEST A THERMOMETER.

The common thermometer in a japanned iron case is usually inaccurate. To test the thermometer, bring water into the condition of active boiling, warm the thermometer gradually in the steam and then plunge it into the water. If it indicates a fixed temperature of 212 degrees, the instrument is a good one.

HOW TO DEODORIZE A ROOM.

Coffee pounded in a mortar and roasted on an iron plate, sugar burned on hot coals, and vinegar boiled with myrrh and sprinkled on the floor and furniture of a sick-room, are excellent deodorizers.

HORSE-RADISH.

A London medical man says: "Be careful in your dealings with horse-radish. It irritates the stomach far more than spice, and an overdose will bring on an unpleasant sensation for days."

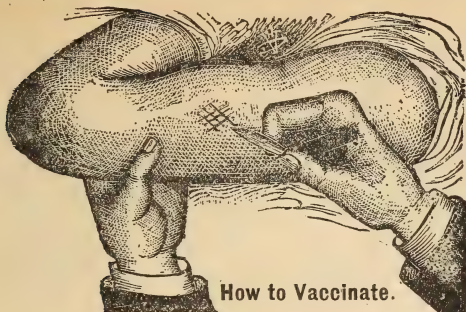
HOW TO KEEP GRAPES.

Use the common pasteboard boxes, which accumulate in every family. Cut a layer of cotton the size of the box, and put it in the bottom; over this a layer of grapes, then more cotton and grapes, until the box is full, ending with the cotton. Cover, and paste paper strips around joining of box and cover. Keep in a cool, dry place.

AN EXCELLENT PAINKILLER.

Gum of myrrh, $\frac{1}{4}$ ounce,
Camphor gum, $\frac{1}{4}$ ounce,
Cayenne pepper, $\frac{1}{4}$ ounce,
Gum guaiac, $\frac{1}{4}$ ounce,
Alcohol, 1 pint.

Mix and shake thoroughly, and filter or let settle for use. Apply externally, or for pains, griping, and diarrhœa, take a teaspoonful at one dose and repeat as occasion may require.



How to Vaccinate.

REMEDY FOR SMALL POX.

1 grain sulphate of zinc; 1 grain foxglove (*digitalis*),
 $\frac{1}{2}$ teaspoonful sugar.

Mix with 2 teaspoonfuls of water, add 4 oz. of water. Dose, 1 spoonful every hour, child in proportion. From experience it is known that nothing will break up this frightful disease sooner than continued and persevering bathing, with the water at a comfortable temperature.

A GOOD REMEDY FOR COLD IN CHILDREN.

Take half a cup of molasses, a tablespoonful of butter, and two tablespoonfuls of vinegar; cook ten minutes and give a tablespoonful every two hours.

FOR BARB WIRE CUTS.

Take carbolic acid 1 ounce; water 1 pint; mix. Apply this to the cut 3 or 4 times a day until the cavity gets nearly full with new flesh, and then apply mutton tallow.

HOW TO TRIM LAMPS.

In trimming the wicks, leave a thin coat of the brown edge. It takes a steady hand to trim a wick, so that it will burn with an even and steady flame. The wick should always be turned down. If it is above the burner, the kerosene will flow down the sides of the lamp more or less.

TO TOUGHEN LAMP CHIMNEYS AND GLASSWARE.

Immerse the article in a pot filled with cold water, to which some common salt has been added. Boil the water well, then cool slowly. Glass treated in this way will resist any sudden changes of temperature.



Practical Rules and Receipts for Builders, Carpenters, Wood-Workers and House-Keepers.

1. Moisture-proof glue is made by dissolving 16 ounces of glue in 3 pints of skim milk. To make the glue still stronger add a little powdered lime.
2. Shellac and borax, boiled in water will, make a good stain for floors or other wood-work.
3. Porch floors should be made of narrow boards, and the joints laid in white lead.
4. A common brick will absorb about a pint of water, and a house built of brick, without a dead wall, is liable to be very damp.
5. A closet, finished with red cedar shelves and drawers, is sure proof against moths and other insects.
6. Oak floors will stand dampness better than maple.
7. It is much better to oil floors than to paint them. A monthly rubbing will keep them as good as new.
8. Do not construct solid doors of two kinds of hardwood. Changes in the weather will cause one to warp more than the other, and consequently great difficulty will be experienced.

TO FILL CRACKS IN PLASTER.

Use vinegar instead of water to mix your plaster of Paris. The resultant mass will be like putty, and will not "set" for 20 or 30 minutes, whereas, if you use water, the plaster will become hard almost immediately, before you have time to use it. Push it into the cracks and smooth it off nicely with a tableknife.

TO REMOVE GLASS STOPPERS.

When the stopper on a glass decanter is too tight, a cloth wet with hot water and applied to the neck will cause the glass to expand, and the stopper may be removed. In a phial, the warmth of the finger may be sufficient. Tapping the stopper with a penknife often has the desired effect.

WHITEWASH THAT WILL NOT RUB OFF.

Mix up a pailful of lime and water ready to put on the wall; then take one-fourth pint of flour, mix with water, then pour on it a sufficient quantity of boiling water to thicken it, and pour it while hot into the whitewash; stir all well together and use.

TO REMOVE FLY SPOTS.

Dip a camel-hair brush into spirits of wine, and apply it to remove fly spots.

HOW TO PREPARE KALSOMINE.

Soak one pound of glue twelve hours; then dissolve it in boiling water, and add eighteen or twenty pounds of paris white. Then dilute with water until the mixture is of the consistency of milk. To this mixture add any coloring that may be desired.

A BEAUTIFUL REDWOOD FINISH.

One quart spirits of turpentine,
One tablespoonful raw linseed oil,
One tablespoonful of brown japan,
One-fourth pound burnt sienna,
One pound of corn starch.

Mix thoroughly, and apply with a brush.

HOW TO MAKE A PERMANENT OUT-DOOR WHITEWASH.

Take good lime and slake it in sour milk, and when slaked dilute with water until it is of the consistency of ordinary whitewash, then apply with a brush.

ANOTHER METHOD.—Slake the lime with sufficient water to make a thick mush. While still hot stir into it a pound or more of tallow to a peck of lime. Then thin the lime with water and apply with a brush. It is best to have a little fire to keep the lime warm while using it.

HOW TO PURIFY SINKS AND DRAINS.

To one pound of common copperas add one gallon of boiling water, and use when dissolved. The copperas is deadly poison, and should always be carefully labeled, if kept on hand. This is one of the best possible cleansers of pipes and drains.

HOW TO CLEAN GILT FRAMES.

When the gilt frames of pictures or looking-glasses, or the gilt mouldings of rooms have specks of dirt upon them, from flies or other causes, they can be cleaned with the white of an egg, gently rubbed on with a camel-hair pencil.

HOW TO MAKE A PERFECT HOLE IN A PIECE OF GLASS.

First cover the glass with a little stiff clay or putty where you desire to drill the hole. Then make a hole into the clay, or putty, the size of the desired hole to be made through the glass. Then pour into this hole a little melted lead, and unless the glass is very thick, it will make a perfect and regular hole.

HOW TO POLISH WOOD.

Take the plain surface of any timber or board and soak it in linseed-oil for a week, and then rub it briskly for a few minutes with a new cloth every day for ten days, and it will produce a beautiful glossy surface.

HOW TO REMOVE OLD VARNISH.

5 parts of 36 per cent. silicate of potash,

1 part of sal ammoniac,

1 part of 40 per cent. soda lye.

Mix, and apply.



HOW TO MAKE ALL KINDS OF OINTMENT.

FOOT OINTMENT FOR ALL DOMESTIC ANIMALS.

Equal parts of tar, lard and resin, melted together.

GOLDEN OINTMENT.

One drachm of orpiment mixed with 2 ounces of lard to the consistency of an ointment.

PILE OINTMENT.

2 drachms powdered nutgall,
1 drachm powdered opium,
1 ounce lard,
2 drachms melted wax.

Mix, and apply three times a day.

MAGNETIC OINTMENT FOR MAN AND BEAST.

1 pound elder bark,
1 pound spikenard,
1 pound yellow dock root.

Boil in 2 gallons of water down to 1, then press the strength out of the roots, and boil the liquid down to $\frac{1}{2}$ gallon; add 8 pounds of the best resin, 1 pound of beeswax, and tallow enough to soften. Roll in rolls, and apply by warming and spreading on linen.

HEALING OINTMENT.

4 ounces resin,
6 ounces lard,
2 ounces yellow wax.

Mix, and strain through a cloth.

FOR CHAFING AND OTHER SKIN IRRITATIONS

Rice flour, 1 pound,
Rose pink, 5 grains,
Oil of rose, 10 drops,
Oil of sandalwood, 5 drops.

Mix thoroughly.

**RECEIPTS FOR ALL KINDS OF
LINIMENT.**
**BARRELL'S
INDIAN LINIMENT.**

1 qt. alcohol,
1 oz. tincture of capsicum,
 $\frac{1}{2}$ oz. oil of origanum,
 $\frac{1}{2}$ oz. oil of sassafras,
 $\frac{1}{2}$ oz. oil of pennyroyal,
 $\frac{1}{2}$ oz. oil of hemlock.

Mix.

**ARNICA LINIMENT.**

Add to 1 pint of sweet oil, 2 tablespoonfuls of tincture of arnica. Good for wounds, stiff joints, rheumatism, and all injuries.

LINIMENT FOR OLD SORES.

(MAN OR BEAST.)

Common salt, 1 $\frac{1}{2}$ tablespoonfuls,
Opium, 1 ounce,
Camphor gum, 1 ounce,
Oil of origanum, 1 ounce,
Ammonia, 2 ounces,
Alcohol, 1 pint.



**A FAMILY LINIMENT FOR ACCIDENTS, BRUISES,
LAMENESS AND SWELLING.**

Alcohol, 95 per cent., 1 gallon,
Oil of sassatras, 3 ounces,
Oil of origanum, 3 ounces,
Tinct. of arnica, 2 ounces,
Tinct. of camphor, 2 ounces,
Tinct. of opium, 2 ounces,
Tinct. of valerian, 2 ounces,
Tinct. of Guaiaci, 1 ounce,
Aqua ammonia, 1½ ounce,
Chloroform, 2 ounces,
Tinct. cochineal sufficient to color.

Mix them and make a liniment.

Be sure and shake well before using.

**A LINIMENT FOR CUTS, KICKS, COLLAR GALLS,
WOUNDS, ETC.**

(HORSE LINIMENT.)

Sugar lead, 1½ ounces,
Sul. zinc, 1¼ ounces,
Saltpetre, 1 ounce,
Sal. ammonia, ½ ounce,
Sul. Iron, ½ ounce,
Alcohol, ½ pint,
Water, 2 pints.

Wash the parts 3 or 4 times a day.

DR. DANIELS' CHLOROFORM LINIMENT.

Sweet oil, 1 ounce,
Oil sassafras, $\frac{1}{2}$ ounce,
Aqua ammonia, 4 F., 4 ounces,

Shake thoroughly, and add:

Laudanum, 1 ounce,
Tinct. arnica, 2 ounces,
Chloroform, $\frac{1}{2}$ ounce. Mix.

Nothing better in the world for rheumatism, bruises, sprains, etc. Rub in thoroughly.

Shake before using.



HOW TO MAKE ALL KINDS OF HEALING SALVES.

**A SALVE FOR BURNS, FROSTBITES,
CHAPPED HANDS, ETC.**

Turpentine, 1 ounce,
Bees wax, 1 ounce,
Sweet oil, 1 ounce.

Melt oil and wax together, and put in the turpentine when sufficiently cooled.

**A SALVE FOR BROKEN BREASTS, ABSCESSES,
FEVER SORES, ETC.**

Lard, $\frac{1}{2}$ ounce,
Resin, $\frac{1}{4}$ ounce,
Bees wax, $\frac{1}{4}$ ounce.

Then steep $\frac{1}{4}$ ounce of tobacco in 2 ounces of salt water; strain and boil down to one-half the original quantity. Then mix with the other ingredients while warm.

AN EXCELLENT HEALING SALVE.

Lard, 6 ounces,
Yellow wax, $\frac{1}{2}$ ounce,
Burgundy pitch, 8 ounces.

Melt, and mix together thoroughly.

A SALVE FOR RHEUMATIC PAINS, ULCERS,
BRUISES, ETC.

Resin, 2 ounces,
Mutton tallow, 2 ounces,
Oil of red cedar, $\frac{1}{2}$ ounce,
Oil of wormwood, $\frac{1}{4}$ ounce.

Melt, and mix thoroughly.

A SALVE FOR ALL KINDS OF SORES, CUTS,
BRUISES, ETC., IN MAN OR BEAST.

White wax, 4 drachms,
Lard, 18 drachms,
Crystallized carbolic acid, 3 drachms.

Melt the wax and lard together. Stir until cooled, and then add the carbolic acid previously liquified.

LIP SALVE.

Take of Lard, 1 ounce,
Cacao butter, $1\frac{1}{2}$ ounces,
Spermaceti, $\frac{1}{2}$ ounce,
Yellow wax, $1\frac{1}{2}$ drachms,
Alkannet root, 15 grains.

Melt, and keep liquid over fire for $\frac{1}{4}$ hour; then strain through cloth and add

Oil of lemon, 5 drops,
Oil of bergamot, 9 drops,
Oil of bitter almonds, 2 drops.

This is an excellent emollient application for abraded or chafed surfaces. Apply at night on linen cloth.

Removing Stains.

Grease Spots.—Cold rain water and soap will remove machine grease from washable fabrics.

Stains from Acids can be removed by spirits of hartshorn, diluted. Repeat, if necessary.

Iron Rust.—Dip the rusty spots in a solution of tartaric or citric acid; or wet the spots and rub on hard, white soap; expose it to the heat; or apply lemon juice and salt, and expose it to the sun.

To Take Out Scorch.—Lay the article scorched where the bright sunshine will fall upon it. It is said it will remove the spot, and leave it white as snow.

Mildewed Linen.—This may be restored by soaping the spots; while wet, covering them with fine chalk scraped to powder, and well rubbed in.

To Remove Mildew.—Remove mildew by dipping in sour buttermilk and laying in the sun.

Coffee Stains.—Pour on them a small stream of boiling water before putting the article in the wash.

Grass Stains.—Wash the stained places in clean, cold, soft water, without soap, before the garment is otherwise wet.

Tea Stains.—Clear, boiling water will remove tea stains and many fruit stains. Pour the water through the stain, and thus prevent its spreading over the fabric.

Medicine Stains.—These may be removed from silver spoons by rubbing them with a rag dipped in sulphuric acid, and washing it off with soap suds.

Fruit Stains.—Freezing will take out all old fruit stains. and scalding with boiling water will remove those that have never been through the wash.

Ink Stains.—Ink stains may sometimes be taken out by smearing with hot tallow, left on when the stained articles go to the wash.

Ink in Cotton, Silk and Woolen Goods.—Saturate the spots with spirits of turpentine, and let it remain several hours; then rub it between the hands. It will crumple away without injuring either the color or the texture of the article.

To Remove Paint Stains on Windows.—It frequently happens that painters splash the plate or other glass windows when they are painting the sills. When this is the case, melt some soda in very hot water and wash them with it, using a soft flannel. It will entirely remove the paint.

To Remove Grease From Coat Collars.—Wash with a sponge moistened with hartshorn and water.

To Clean Wall-Paper.—Tie a soft cloth over a broom, and sweep down the walls carefully.

Stains on the Hands.—A few drops of oil vitriol (sulphuric acid) in water, will take the stains of fruit, dark dyes, stove blacking, etc. from the hands without injuring them. Care must, however, be taken not to drop it upon the clothes. It will remove the color from woolen, and eat holes in cotton fabrics. To remove ink or fruit stains from the fingers, take cream of tartar, half an ounce; powdered salt of sorrel, half an ounce; mix. This is what is sold for salts of lemon.

Removing Grease From Silk.—Apply a little magnesia to the wrong side, and the spots will disappear.

To Clean Furs.—Shake and whip them well; then brush; boil some flax seed; dip a rag in the water and wipe them slightly. This makes them look nearly as good as new.

To Preserve Furs.—First, hang them out in the sun for a day or two; then give them a good beating and shaking up, to be sure no moth is in them already. Then wrap up a lump of camphor in a rag, and place in each; then wrap up each in a sound newspaper and paste together, so there is no hole or crevice through which a moth can gain entrance.

To Clean Velvet.—Wet a cloth and put it over a hot flat-iron, and a dry one over that; then draw the velvet across it, brushing it at the same time with a soft brush, and it will look as nice as new.

Wrinkled Silk.—Wrinkled silk may be rendered nearly as beautiful as when new, by sponging the surface with a weak solution of gum-arabic or white glue; then iron on the wrong side.

To Make Cloth Water-Proof.—In a pail of soft water put half a pound of sugar of lead, half a pound of alum; stir this at intervals until it becomes cool; then pour it into another pail and put the garment therein, and let it be in for twenty-four hours, and then hang it up to dry without wringing it.

To Color Kid Gloves.—Put a handful of logwood into a bowl, cover with alcohol, and let it soak until it looks strong—one day, perhaps. Put one glove on the hand, dip a small woolen cloth or sponge into the liquid, wet the glove all over, rub it dry and hard until it shines, and it will be a nice purple. Repeat the process, and it will be black.

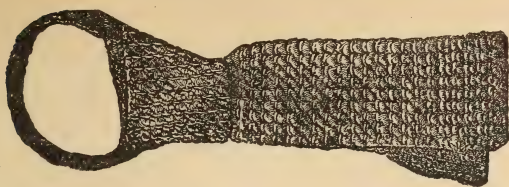
Washing Kid Gloves.—First, see that your hands are clean, then put on your gloves and wash them as though you were washing your hands, in a basin of spirits of turpentine. This method is used in Paris. The gloves should be hung in the air, or some dry place, to carry away the smell of turpentine.



NEW AND SCIENTIFIC METHODS
For Taking Out all kinds of Grease Spots, Fruit or Ink
Stains, Paints, Oils, Etc.

The left column shows the kind of stain and the top column
the kind of cloth.

Kind of Stain	From Colored Cotton	From Colored Woolen.	From Linen.	From Silks.
Grease Spots.	Soap and Water or Benzine.	Soap and Water or Benzine.	Soap Suds or Benzine.	Chloroform, Benzine or Chalk.
Fruit Stains or Red Ink.	Warm Soap Suds or Ammonia and Water.	Warm Soap Suds or Ammonia and Water.	Warm Chlorine Water.	Warm Water mixed with Ammonia or warm Soap Suds.
Oil Paint or Varnish.	Turpentine or Benzine.	Turpentine.	Turpentine.	Ether or Soap or Benzine.
Ink Stains.	A solution of Citric Acid. Wash repeatedly.	Dilute Hydrochloric Acid.	A warm solution of Oxalic Acid.	No remedy.
Iron Stains.	A solution of Citric Acid. Wash repeatedly.	Dilute Hydrochloric Acid.	A warm solution of Oxalic Acid.	No remedy.
Wagon Grease or Coal Tar.	Rub with lard then Soap it and apply Turpentine.	Rub with lard then Soap it and then wash alternately with Water and Turpentine.	Soap or Turpentine or Benzine.	First lard it, then soap it, then wash alternately with Water and Benzoin instead of Benzine.
Nut Shell Stains.	Wash alternately with water and diluted Chlorine water.			



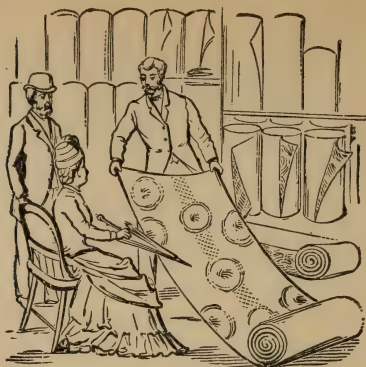
How to Clean Neckties, Ribbons, Etc.

Get a quart fruit-jar with rubber and cover; half fill it with naphtha and put the ties in, the white ones by themselves and first of all. Having screwed the cover down tightly, shake the jar about for some minutes, when the dirt will almost be entirely removed. If necessary, repeat the process. Smooth them out carefully, and pat any streaked or discolored places with a bit of cloth—an old handkerchief will do nicely. Then hang them in the air to dry and allow the odor to evaporate. It is best to leave them out some days. A bit of mosquito-netting or cheese-cloth will be required to cover them from dust or flies. The darker ties may be put in the same naphtha. It is well to have two jars: one for first washing, another for the second dipping if necessary. The naphtha should be kept in a close-stoppered bottle, and such work should always be done by daylight in a room without a fire and with open windows, if possible, as the vapor from naphtha is highly inflammable.

How to Clean Silk.

To Remove Grease Spots.—Scrape French chalk fine; moisten to a stiff paste with soap-suds; make into small flat cakes, and dry in the sun or oven. When a spot is to be cleaned, scrape one of the cakes to a powder, cover the spot with it, laying the silk on a linen or cotton cloth. Lay several folds of tissue paper upon the chalk, and press with a hot iron for several minutes, taking care it does not touch the silk.

To Wash Silk.—Mix together 2 cups cold water, 1 tablespoonful honey, 1 tablespoonful soft soap, 1 wine-glass alcohol. Lay the silk on a board, sponge both sides with it, rubbing it in well. Shake up and down in a tub of cold water. Shake dry but do not wring it. Iron on the wrong side while it is very damp.



How to Clean Carpets, Matting, Etc.

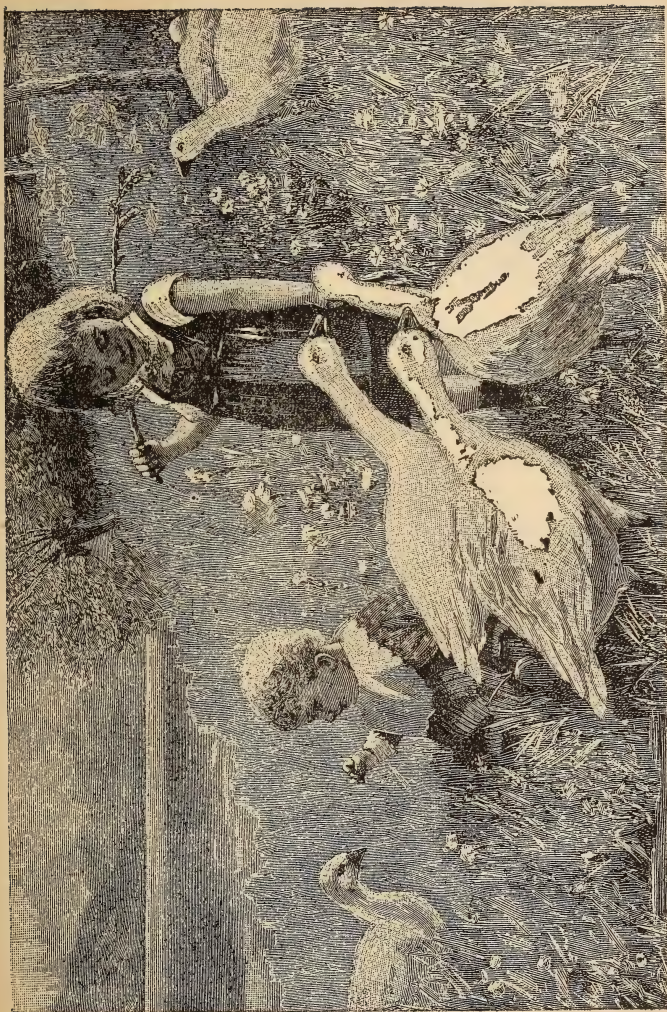
1. Sprinkle salt over it; then sweep it well and it will make an old carpet look almost like new.
2. Take warm water and pour in a little ammonia and wipe carpet with a large sponge or soft rag. This will also take out grease spots should there be any.
3. A weak solution of alum or soda will brighten up the colors wonderfully. Use warm water.
4. Fresh green grass dampened a little and spread upon the carpet and then swept up will brighten and beautify a carpet. It is much better than tea leaves for it will leave no stains.
5. Never use soap or hot water on oil cloth.
6. Always beat a carpet on the wrong side first.

MATTING.

Straw matting can be cleaned beautifully by using warm water and salt and then rubbing dry with a cloth to avoid turning yellow.

KEROSENE STAINS IN CARPETS.

Kerosene stains in carpets may be removed by sprinkling buckwheat flour over the spot. If one sprinkling is not enough, repeat.





BLACK INK.

Take one package of Diamond Slate Dye and dissolve in a pint of soft boiling water. It will make a pint of excellent jet black ink at the small cost of ten cents.

RED, GREEN, PURPLE, BLUE OR YELLOW INKS.

Take ten grains of the desired color of aniline and mix with one ounce of soft water, in which about 15 grains of gum arabic have been dissolved. A bottle of ink of any of the above colors can be made at a cost of five cents.

WHITE INK.

Mix pure Flake White with water containing enough Gum Arabic to prevent the immediate settling of the substance.

Five cents worth of Flake White will make a bottle of ink.

GOLD OR SILVER INK.

Take ten cents worth of Gold or Silver bronze and mix with water containing Gum Arabic to the thickness of ordinary mucilage, and apply to pen with a small brush or stick.

Many of the *high priced inks* that are advertised and sold as *mineral inks*, are nothing more or less than the above preparations.

INDELIBLE INK.

Nitrate of silver 50 grains; tartaric acid, 40 grains; carmine, No. 40, 5 grains; liquor ammoniæ, $\frac{1}{2}$ ounce; mucilage of gum arabic, $\frac{1}{2}$ ounce. Dissolve the nitrate of silver in the ammonia, and add the tartaric acid; then rub the carmine with the solution, then add the mucilage.



CHEAP AND BEAUTIFUL INK.

INDELIBLE INK FOR MARKING CLOTHING.

5 scruples nitrate of silver,
2 drachms gum arabic.
1 scruple sap green,
1 ounce distilled water.

Mix together. Before using on the article to be marked, apply a little of the following :

$\frac{1}{2}$ ounce carbonate of soda,
4 ounces distilled water.

Let this last, which is the mordant, get dry ; then with a quill pen write what you require.

HOW TO MAKE INVISIBLE INK FOR POSTAL CARDS.

2 ounces of water,
 $\frac{1}{4}$ ounce of cobalt, dissolved in a little muriatic acid,
 $\frac{1}{2}$ drachm of mucilage of gum acacia.

Write on paper with this liquid and it remains invisible until heated. On cooling it becomes invisible again.

INK FOR MARKING PACKAGES.

Take lamp black and mix thoroughly with sufficient turpentine to make it thin enough to flow from the brush. Powdered ultra-marine blue makes a fine blue marking ink.



HOW TO MAKE ALL KINDS OF GLUE, PASTE, MUCILAGE, ETC.

TO CEMENT BROKEN CHINA, ETC.

Beat the whites of eggs well to a froth, let them settle; add soft grated or sliced cheese and quick lime; beat them well together, and apply a little to the broken edges. This cement will endure both fire and water. Another good receipt, and which is nearly colorless, is the following: Dissolve $\frac{1}{2}$ ounce of gum acacia in a wineglass of boiling water, add plaster of Paris sufficient to form a thick paste, and apply it with a brush to the parts required to be cemented together.

CHEAP WATERPROOF GLUE.

Melt common glue with the smallest possible quantity of water; add, by degrees linseed oil, rendered drying by boiling with litharge. While the oil is being added, the ingredients must be well stirred, to incorporate them thoroughly.

PAPER AND LEATHER PASTE.

Cover 4 parts, by weight, of glue, with 15 parts of cold water and allow it to soak for several hours, then warm moderately till the solution is perfectly clear, and dilute with 60 parts of boiling water, thoroughly stirred in. Next prepare a solution of 30 parts of starch in 200 parts of cold water, so as to form a thin homogeneous liquid, free from lumps, and pour the boiling glue solution into it with thorough stirring, and at the same time keep the mass boiling

PREPARED GLUE FOR CONSTANT USE.

To any quantity of glue use common whiskey instead of water. Put the bits of glue, well broken up, into a bottle; fill up with the spirit, and set it in a closet, or where it is warm, for a week; then it will be ready to use without the application of heat.

Glue thus prepared will keep for years, and will be fit for use at all times, unless the weather is very cold, then place the bottle in boiling water for a few moments. To obviate the difficulty of the stopper becoming tight from the glue, it is a good plan to make the glue in a tin box, and the cover will fit on tightly without sticking. It must be closed tight or the spirit will evaporate.

MUCILAGE FOR LABELS.

2 ounces dextrine,	1 ounce alcohol,
1 drachm glycerine,	6 ounces water.

PASTE FOR PAPERING BOXES.

Boil water and stir in batter of wheat or rye flour. Let it boil one minute, take off and strain through a colander. Add, while boiling, a little glue or powdered alum. Do plenty of stirring while the paste is cooking, and make of consistency that will spread nicely.

PASTE FOR SCRAP BOOKS.

Take half a teaspoonful of starch, same of flour, pour on a little boiling water, let it stand a minute, add more water, stir and cook it until it is thick enough to starch a shirt bosom. It spreads smooth, sticks well and will not mold or discolor paper. Starch alone will make a very good paste. Adding 10 drops of oil of clover to $\frac{1}{2}$ pint of this preparation will make it more permanent.

COMMON MUCILAGE FOR HOME AND BUSINESS USE.

Take one ounce of gum arabic and reduce it to the consistency of common mucilage by pouring warm water on it, and let it stand a few hours. This makes a very good mucilage, and it costs but a trifle.



HOW TO DYE ALL KINDS OF CLOTH IN PERMANENT COLORS.

For Cotton Goods, Woolen, Silk, Etc.

YELLOW.

To color yellow, take 1 ounce of bicromate of potash and 2 ounces of sugar of lead. Dissolve them separately in as much hot water as will cover the goods. Dip into potash water first.

The above will color two pounds of cotton goods.

BLUE.

Dissolve 1 ounce prussian blue and 2 ounces oxalic acid in enough cold water to cover the goods. Will color two pounds of cotton goods.

GREEN.

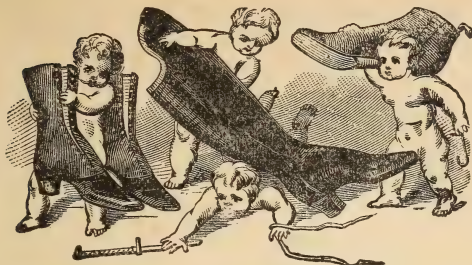
Dissolve one ounce of prussian blue in cold water. Let goods remain in over night, then proceed as for yellow.

BLACK.

Soak the cloth in acetate of iron mordant, and then boil in a decoction of madder and logwood.

For Woolen Goods, Silks, Linens, Etc.

Use Diamond Dyes. The colors will remain permanent in woolens, silks and linens, but for cotton cloth they are not satisfactory.



How to Make all Kinds of Blacking, Oil and Dressing for Boots and Shoes.

TO MAKE SHOES OR BOOTS WATERPROOF.

Melt together, equal quantities of beeswax and mutton suet. While liquid rub it over the leather, including the soles.

TO SOFTEN BOOTS AND SHOES.

Kerosene will soften boots and shoes which have been hardened by water, and render them as pliable as new.

LIQUID BLACKING.

- 2 pounds ivory black.
- 1 pound sweet oil.
- 2 pounds molasses.

Rub together till well mixed ; then add oil of vitriol, $\frac{3}{4}$ pound, coarse sugar $\frac{1}{2}$ pound ; dilute with beer bottoms. This cannot be excelled.

WATERPROOF COMPOUND, FOR LEATHER BOOTS, SHOES, Etc.

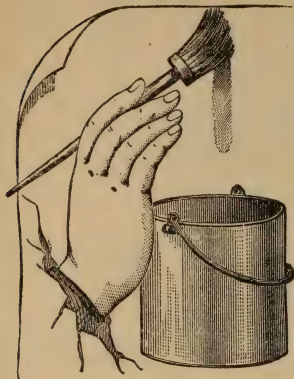
- 8 ounces suet.
- 8 ounces linseed oil.
- 6 ounces yellow beeswax.
- 1 $\frac{1}{2}$ ounces neatsfoot oil.
- 1 ounce lamp black.
- $\frac{1}{2}$ ounce litharge.

Melt together, and stir till cold.

BLACKING FOR LADIES' SHOES.

- 3 ounces of Gum Shellac.
- 1 $\frac{1}{2}$ ounces of Aqua Ammonia.
- 10 ounces of water.

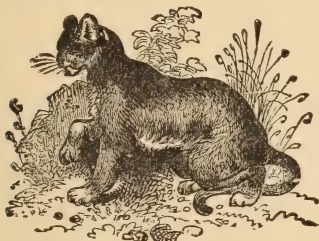
Boil until the shellac has dissolved. Then add a little black Aniline for coloring, and add water enough to make about 20 ounces.

HOW TO MIX PAINTS OF VARIOUS COLORS.

A correspondent asks us a question on this subject, and we have no doubt there are numerous painter's manuals, or books of instruction, in existence; but many of these are not very reliable. We give the following table of compound colors, showing the simple colors which produce them, which may be of some service to our inquirer.

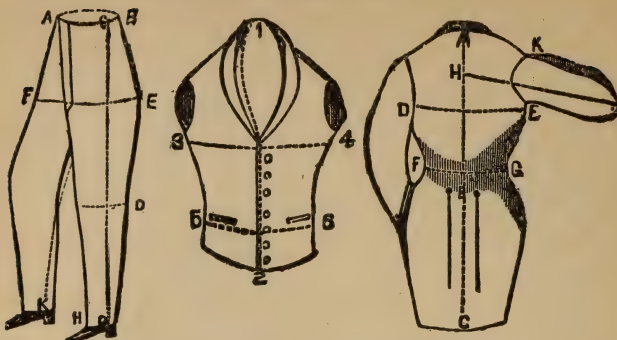
Buff—White, yellow ochre and red.
 Chestnut—Red, black and yellow.
 Chocolate—Raw umber, red and black.
 Claret—Red, umber and black.
 Copper—Red, yellow and black.
 Dove—White, vermilion, blue and yellow.
 Drab—White, yellow ochre, red and black.
 Fawn—White, yellow and red.
 Flesh—White, yellow ochre and vermilion.
 Freestone—Red, black, yellow ochre and white.
 French Grey—White, prussian blue and lake.
 Grey—White lead and black.
 Gold—White, stone ochre and red.
 Green Bronze—Chrome green, black and yellow.
 Green Pea—White and chrome green.
 Lemon—White and chrome yellow.
 Limestone—White, yellow ochre, black and red.
 Olive—Yellow, blue, black and white.
 Orange—Yellow and red.
 Peach—White and vermilion.
 Pearl—White, black and blue.
 Pink—White, vermilion and lake.
 Purple—Violet, with more red and white.
 Rose—White and madder lake.
 Sandstone—White, yellow ochre, black and red.
 Snuff—Yellow and vandyke brown.
 Violet—Red, blue and white.

In the preceding table of the combination of colors required to produce a desired tint, the first-named color is always the principal ingredient, and the others follow in the order of their importance. Thus in mixing a limestone tint, white is the principal ingredient, and the red the color of which the least is needed. The exact proportions of each color must be determined by experiment with a smaller quantity. It is best to have the principal ingredient thick, and add to it the other paints thinner.



How to Tan Hides with Hair On.

A cheap and simple process is to apply to the flesh side, when fresh and wet, a mixture of two parts of saltpeter and one part alum. These should be finely pulverized and sprinkled over every part of the skin; double in flesh to flesh, roll up and let it lie a day or two; then with a dull knife remove the flesh and fat, if any has been left. When about half dry, commence rubbing and continue working until dry. The skin will be found very nice, white and pliable, and the hair firmly set.



How to Take the Measure for a Suit of Clothes.

Take these Measures over the Vest:

INCHES

- From 1 at center of back of neck, round the inside edge
of the collar, to height required from top button
- From top button to 2 for length in front.
- From 3 to 4 round breast.....
- From 5 to 6 round waist.....

MEASURE FOR PANTS.

- From A to B round waist.....
- From C to D, top to bottom.....
- From center to fork, close up, down to K, for length of
leg inside, the leg straight down.....
- F to G round the seat.....
- L round the knee.
- From H to I round bottom

Take these Measures outside the Coat:

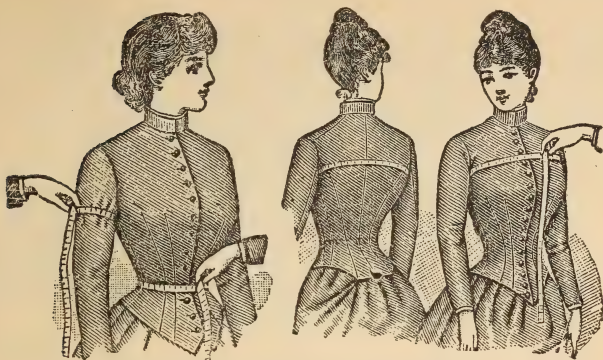
- From A to B... ..
- Continuing on to C for full length.....
- From H to I for elbow joint.....
- Continuing on to K for length of sleeve.....

Take these Measures under the Coat:

- From D to E round the breast.....
- From F to G round the waist.....

FOR AN OVERCOAT.

Take the last two measures over the undercoat; the others
same as above.



How to Take Measures for Patterns.

DRESSES, COATS, VESTS, PANTS AND SHIRTS.

To Measure for a Lady's Basque or any Garment requiring a Bust Measure to be taken:—Put the measure around the body, OVER the dress, close under the arms, drawing it closely—not too tight.

To Measure for a Lady's Skirt or Overskirt:—Put the measure around the waist, OVER the dress.

To Measure for a Lady's Sleeve:—Put the measure around the muscular part of the upper arm, about an inch below the lower part of the arm's-eye, drawing the tape closely—not too tight.

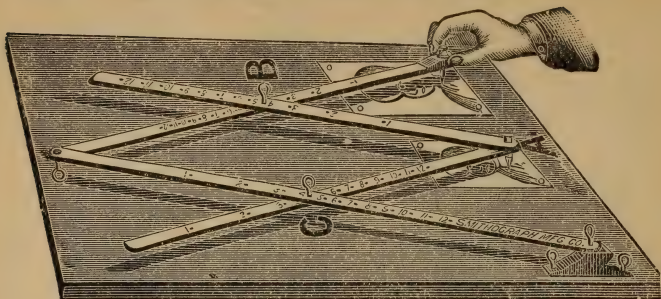
Take the measure for Misses' and Little Girls' Patterns the same as for Ladies'. In ordering, give the ages also.

To Measure for a Boy's Coat or Vest:—Put the measure around the body, UNDER the jacket, close under the arms, drawing it closely—not too tight.

To Measure for a Boy's Overcoat:—Measure about the breast OVER the garment the coat is to be worn over.

To Measure for Trousers:—Put the measure around the body, OVER the trousers at the waist, drawing it closely—not too tight.

To Measure for a Shirt:—For the size of the neck, measure the exact size where the collar encircles it, and allow one inch—thus, if the exact size be fourteen inches, use a Pattern marked 15 inches. In other words, give the size of the collar the shirt is to be worn with. For the breast, put the measure around the body, under the jacket or coat, close under the arms, drawing it closely—not too tight.



THE DELINEATOR.

How to Enlarge Portraits and Pictures for Painting and Drawing.

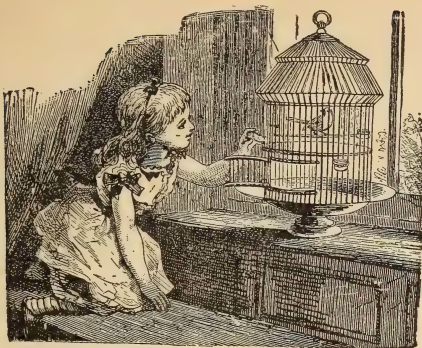
— ALSO —

How to Enlarge Embroidery, Braiding Patterns, Mats, Engraving Capital Letters, Scrolls, Music, Etc.

1. The Delineator, as shown in the above engraving, is fastened to a table or board with a little screw or awl. The little steel point at "A" rests on the picture or work to be copied. The pencil in the hand copies as fast as the steel point traces the small picture. The Delineator is set to enlarge four times by the little finger screws "B and C." If you wish your picture the same size as the copy, put the screws at number one. If you wish your picture twelve times as large as the copy, put the screws in number twelve in each of the four bars.

2. Keep the pencil sharpened under the hand. It is not necessary to watch the pencil in the movements of the hand, but to watch the steel point at "A."

3. Now any one can easily make a delineator, by going to the hardware store and securing a few little screws, as shown in the cut, and then making or securing four little pieces of wood, as shown in the illustration, of about two feet in length. If pictures are to be very much enlarged, the sticks may be made larger, so that the delineator may enlarge twenty-five or one hundred times.



HOW TO RAISE CANARIES

AND

Keep them Healthy and in Good Song.

1. In Summer keep them out of doors in some cool and shady place.
2. In Fall, Winter or Spring, hang the cage so that no draught of air can strike the bird.
3. Give nothing to healthy birds but rape, hemp, canary seed, water, cuttle-fish bone, and gravel paper or sand on the floor of the cage.
4. A bath three times a week.
5. The room should not be overheated.
6. When moulting keep warm and avoid all draughts of air.
7. Give plenty of German Summer rape seed. A little hard boiled egg mixed with cracker, grated fine, once or twice a week, is excellent.
8. Feed at a certain hour in the morning.

DISEASES AND CURES.

9. *Husk or Asthma.* The curatives are aperients, such as endive, water cresses, bread and milk and red pepper.
10. *Pip.* Mix red pepper, butter and garlic and swab out the throat.

11. *Sweating.* Wash the hen in salt water, and dry rapidly.
12. *Costiveness.* Plenty of green food and fruit.
13. *Lice.* Keep a saucer of fresh water in the cage, and the bird will free itself.
14. *Overgrown Claws or Beak.* Pare carefully with a sharp knife.
15. *Moulting.* Give plenty of good food and keep warm. Saffron and a rusty nail put in their drinking water is excellent.
16. *Loss of Voice.* Feed with paste of bread, lettuce and rape seed with yolk of egg. Whiskey and sugar is a good remedy.
17. To keep insects out of bird cages, tie up a little powdered sulphur in a bag and hang it in the top of the cage.



How to Keep Furs From Moth.

Moths will avoid light and sunshine. Before packing away furs, sun them several hours in the open air, then tie them tightly in a linen, cotton or paper bag, which is whole. A little snuff placed in the bottom is a good thing.

If moth are already at work, fumigate with sulphur placed on live coals. Close the room in which the furs are placed, and be careful not to inhale the fumes. Fumigating rooms after scarlet fever or other contagious diseases is said to destroy all the diseased germs.



THE OLD STYLE OF WASHING.

**HOW TO POLISH OR ENAMEL SHIRT BOSOMS,
MAKE SOAP, Etc.**

To Polish or Enamel Shirt Bosoms.

1 ounce of white wax,
2 ounces of spermaceti.

Melt together. Heat gently and turn into a very shallow pan ; when cold cut or break in pieces. When making boiled starch the usual way, enough for a dozen bosoms, add to it a piece of the polish the size of a hazel nut.

How to Make Hard Soap from Soft.

7 pounds of good soft soap,
4 pounds of sal soda,
2 ounces borax,
1 ounce hartshorn,
 $\frac{1}{2}$ pound resin.

Dissolve in 22 quarts of water and boil about 20 minutes.

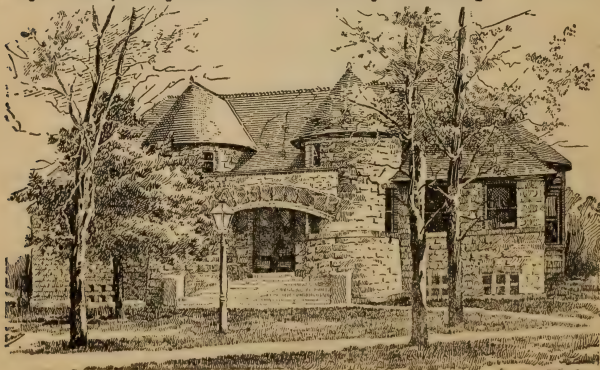
How to Make the Best Soap for Washing Fine Linen.

To make the best washing soap, and one that is suitable for either laundry or toilet purposes, will not soil the finest fabric, or injure the most delicate complexion, use the following:

Take 10 pounds white bar soap,
2 gallons of soft water,
5 pounds sal soda (common washing soda).

Dissolve 4 ounces of borax and 1 ounce of salts of tartar in a little water; cut the soap in slices, and boil until dissolved; then add the soda and salts of tartar, and mix thoroughly; pour into a box or mold, or cut into bars. This makes 25 pounds of soap which has no equal.

DIRECTIONS. Put the clothes to soak in warm water; soap each in proportion to the amount of dirt it contains—only the dirtiest will need rubbing. Rinse thoroughly, and your clothes will look better and wear longer than washed in any other way. Try it once, and you will never use any other soap.





HOW TO MAKE ALL KINDS OF FURNITURE WASHES AND REMOVE STAINS, BRUISES, MOTHS, Etc.

W. W. WICKLE'S FURNITURE POLISH.

1½ qts. raw linseed oil, 1 qt. turpentine,
½ qt. boiled linseed oil, 3 ozs. bees wax.

FURNITURE POLISH.

Equal quantities of common wax, white wax and white soap, in the proportion of one ounce of each, to a pint of water. Cut the above ingredients fine, and dissolve over a fire until well mingled. Bottle and label.

A good temporary wash is kerosene oil.

TO REMOVE STAINS, SPOTS AND MILDEW FROM FURNITURE.

Take ½ pint of 98 per cent. alcohol,
¼ ounce of pulverized resin,
¼ ounce gum shellac.

Add ½ pint of linseed oil, shake well, and apply with a brush or sponge. Sweet oil will remove finger marks from varnished furniture, and kerosene from oiled furniture.

TO TAKE BRUISES OUT OF FURNITURE.

Wet the part with warm water, double a piece of brown paper 5 or 6 times, soak it and lay it on the place: apply on that a hot flat-iron, till the moisture is evaporated. If the bruises be not gone, repeat the process. After 2 or 3 applications, the dent or bruise will be raised level with the surface.

A POLISH FOR NEW FURNITURE.

1 pint of alcohol.	1 $\frac{1}{4}$ ozs. copal.
1 oz. shellac.	1 oz. dragon's blood.

Mix and dissolve. Apply with sponge or soft brush.

A POLISH FOR WOOD OR LEATHER.

1 pint alcohol.
3 $\frac{1}{4}$ sticks sealing wax.

Dissolve by heating it, and apply warm with sponge.

N. B. The sealing wax should be the color of the leather, black, red or blue.

TO REMOVE MOTHS FROM FURNITURE.

Moths may be exterminated or driven from upholstered work, by sprinkling this with benzine. The benzine is put in a small watering pot, such as is used for sprinkling house-plants; it does not spot the most delicate silk, and the unpleasant odor passes off in an hour or two in the air.

Care must be used not to carry on this work near a fire or flame, as the vapor of benzine is very inflammable. It is said, that a little spirits of turpentine added to the water with which the floor is washed, will precent the ravages of moths.

TO CLEAN MIRRORS, WINDOW GLASS, ETC.

Take a soft sponge, wash it well in clean water and squeeze it as dry as possible; dip it in some spirits of wine and rub over the glass; then have some powdered blue tied up in a rag, dust it over your glass, and rub it lightly and quickly with a soft cloth; afterwards finish with a silk handkerchief.

TO REMOVE STAINS IN TABLES.

Wash the surface with vinegar; the stains will then be removed by rubbing them with a rag dipped in spirits of salts. To repolish, proceed as you would with new work. If the work be not stained, wash the surface with clean spirits of turpentine and repolish it with furniture oil.

TO TAKE SMOKE STAINS FROM WALLS.

An easy and sure way to remove smoke stains from common plain ceilings, is to mix wood ashes with the whitewash just before applying. A pint of ashes to a small pail of whitewash is sufficient, but a little more or less will do no harm.

TO REMOVE TEA STAINS.

Mix thoroughly soft soap and salt, say a tablespoonful of salt to a teacupful of soap, rub on the spots and spread the cloth on the grass where the sun will shine on it. Let it lie for 2 or 3 days, then wash. If the spots are wet occasionally while lying on the grass, it will hasten the bleaching.

HOW TO DISINFECT A CELLAR.

A damp, musty cellar may be sweetened by sprinkling on the floor pulverized copperas, chloride of lime, or even common lime. A most effective means to disinfect decaying vegetable matter, is chloride of lime in solution. One pound may be dissolved in 2 gallons of water. Plaster of Paris has also been found an excellent absorbent of noxious odors. If used 1 part with 3 parts of charcoal, it will be found still better.



HOW TO SHINE SILVER, BRASS, COPPER, TIN, ETC.

Dissolve a quantity of alum in water so as to make a pretty strong brine, and skim it carefully, then add some soap to it. dip a linen rag in it and rub over the silver.

A WASH FOR CLEANING SILVER.

$\frac{1}{2}$ ounce fine salt.

$\frac{1}{2}$ ounce powdered alum.

$\frac{1}{2}$ ounce cream of tartar.

Mix together, put them into a large white-ware pitcher, and

pour on 2 quarts of water and stir them frequently till entirely dissolved. Then transfer the mixture to clean bottles and cork them closely. Before using it, shake the bottles well. Pour some of the liquid into a bowl and wash the silver all over with it, using an old, soft fine linen cloth. Let it stand about 10 minutes, and then rub it dry with a buckskin. It will make the silver look like new.

TO WASH GREASY TIN AND IRON.

Pour a few drops of ammonia into every greasy roasting-pan, after half filling the pan with hot water. A bottle of ammonia should always be kept on hand near the sink for such uses; never allow the pans to stand and dry, for it doubles the labor of washing; but pour in water and use the ammonia, and the work is half done.

TO CLEAN BRASS.

Finely-rubbed bichromate of potassa, mixed with twice its bulk of sulphuric acid, and an equal quantity of water, will clean the dirtiest brass very quickly.

TO POLISH NICKEL PLATE.

Scour with pulverized borax; use hot water and very little soap; rinse in hot water, and rub dry with a clean cloth. By this quick process a bright polish may be had.

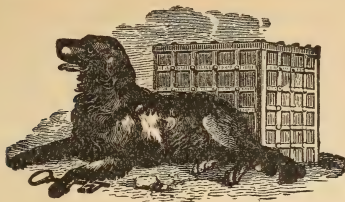
TO CLEANSE BRASSES, TINS, COPPERS, ETC.

Mix rotten-stone, soft soap and old turpentine to the consistency of stiff putty. The article should be first washed in hot water to remove grease, then rub the metal with the mixture mixed with a little water; then rub off briskly with a dry, clean rag or leather, and a beautiful and durable polish will be obtained. The stone should be very fine, or the articles will become wore or scratched.

Very fine emery will answer the same purpose.

To Remove Rust from Knives, Forks, Razors, Etc.

Cover with sweet oil, well rubbed on, and let it remain for 48 hours; then rub with unslaked lime, powdered very fine until the rust disappears.



How to Polish Nickel-Plate.

Apply rouge with a little fresh lard on a piece of buckskin. Rub the nickel, using as little of the rouge and oil as possible, and then wipe off with a clean rag slightly oiled.

How to Polish Zinc.

4 ozs. powdered rotten stone,
2 ozs. pumice stone,
4 ozs. oxalic acid.

Add 2 quarts of rainwater. Mix thoroughly, and let it stand two days before using. Apply the polish to the zinc with a dry woolen cloth or chamois skin.

How to Remove Rust from Iron.

Take the iron and immerse it in a bath of nearly saturated solution of chloride of tin and leave it there from twelve to twenty-four hours, according to the thickness of the rust.

How to Clean Rusty Steel.

Apply and cleanse with the following preparation :

8 parts of prepared buck's-horn,
10 parts of tin putty,
25 parts of spirits of wine.

Mix into a paste and apply, and then rub off with a soft blotting paper.

To Prevent Rust on Iron or Steel.

Take 1 pint of fat oil varnish, mixed with five pints of highly rectified spirits of turpentine, and rub with a sponge. This varnish may be applied to bright stoves, and even to mathematical instruments, without hurting their delicate polish, and they will never contract any spots of rust.



HOW TO MAKE YOUR OWN CANDIES.

1. It is very easy for any one to prepare and make their own candies. They will know of what they are made, and how they are made. In reference to extracts, flavors, acids, etc., they can be procured of your own druggist whom you personally know, and consequently no deleterious drugs will enter into the composition of the candies.

2. It is very necessary that a few things should receive special attention in making candy.

3. Sugar boiled down to a sufficient thickness for candy will remain perfectly clear if not stirred. If it is in any way disturbed by dropping in nuts or other articles, it is liable to go back to sugar.

4. Vinegar or other acids can be added to the sugar, and this will keep it perfectly clear, no matter how much it is stirred or disturbed. Never disturb candy that is intended to be perfectly pure and clear.

5. Boil the sugar in a thick pan, or in a granite or porcelain kettle.

MAPLE SUGAR CANDY.

Boil maple sugar until it becomes sufficiently thick. Then add a teacupful of vinegar for every two quarts of syrup; smaller amounts proportionately. When the candy has reached a sufficient consistency, pour out. Any kind of nuts may be dropped into it, or different flavors may be used, to make almost any kind of candy preparation.

FIG CANDY.

1 pound of sugar,
1 pint of water.

Set over a slow fire. When done add a few drops of vinegar and a lump of butter, and pour into pans in which split figs are laid.

RAISIN CANDY.

Can be made in the same manner, substituting stoned raisins for the figs. Common molasses candy is very nice with all kinds of nuts added.

SCOTCH BUTTER CANDY.

1 pound of sugar,
1 pint of water.

Dissolve and boil. When done add 1 tablespoonful of butter, and enough lemon juice and oil of lemon to flavor.

MOLASSES CANDY.

2½ cups of molasses, 1 tablespoonful of sugar; stir occasionally while boiling; before taking from the fire add butter half the size of an egg, and one-third teaspoonful of soda. Pour into buttered tins, and when cool pull it until well whitened.

MOLASSES CANDY.

2½ cups of sugar, 1 cup of molasses, 1½ cups of water; after it begins to boil add ¼ teaspoonful cream tartar; cook in the usual way, but do not stir; before taking from the fire, add

butter half the size of an egg. Do not butter your hands while pulling.

TAFFY.

2½ cups of brown sugar, ½ cup of butter, 4 tablespoonfuls of molasses, 3 tablespoonfuls of water, 2 tablespoonfuls of vinegar. Boil 20 minutes.

EVERTON TOFFEE.

1¼ lbs. powdered loaf sugar, 1 teacupful water, ¼ lb. butter, 6 drops essence of lemon. Put the water and sugar in a brass pan on the stove. Beat the butter to a cream; when the sugar is dissolved add the butter, and keep stirring the mixture over the fire until it sets. Just before the toffee is done add the lemon.

BUTTER TAFFY.

2½ cups of light-brown sugar, three tablespoonfuls of molasses, two tablespoonfuls of vinegar, two tablespoonfuls of water, one-quarter cup of butter. Boil until it is brittle in water, pour into pans and let it cool.

PEPPERMINT DROPS.

2½ cups of sugar, one-half cup of water; boil six minutes. Flavor with a few drops of the essence of peppermint. Stir until quite thick, then drop on a buttered paper.

CARMELS.

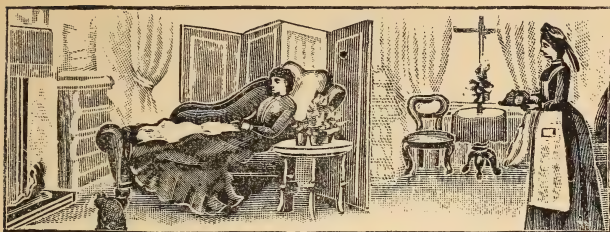
One cup of molasses, two of sugar. Boil ten minutes. Add one large tablespoonful of flour, butter the size of an egg, ½ lb. chocolate. Boil twenty minutes.

CHOCOLATE CARMELS.

Three lbs. brown sugar, ½ lb. butter, ½ lb. of chocolate (fine), one pint of cream or milk. Melt all these together with care, and boil half an hour, stirring constantly. Just before taking off the fire flavor with vanilla, and add a small cup of granulated sugar. Pour into a buttered tin. When partly cool, mark in pieces about an inch square.

COCOANUT DROPS.

One pound of cocoanut, 1 pound of powdered sugar, quarter of a pound of flour, whites of six eggs. Bake in a hot oven.



HOW TO MAKE ALL KINDS OF DRINKS FOR THE SICK.

— FROM TOKOLOGY. —

LEMONADE.

Juice of half a lemon, one teaspoon sugar, one glass of water, either hot or cold, as the case requires. Hot lemonade an excellent remedy for colds and biliousness.

ORANGE WHEY.

Juice of one orange, one pint sweet milk. Heat slowly until curds form. Strain and cool.

EGG LEMONADE.

Juice of one lemon, one glass water, white of one egg, one table-spoon sugar. Beat together.

JELLY WATER.

Sour jellies, or the canned juice of any fruit make pleasant drinks when reduced with water and sweetened.

OAT MEAL TEA.

Two tablespoons raw oat meal, one quart water. Let stand two hours in a cold place, then drain off as wanted.

TOAST WATER.

Toast a thin slice of bread very brown. Let it stand in a bowl of cold water an hour before using.

TAPIOCA MILK.

Soak three tablespoons tapioca one hour in cold water. Add three cups boiling milk, sugar and flavoring to taste, and simmer slowly thirty minutes. Eaten warm. Sago can also be used in the same way.

FLAX-SEED LEMONADE.

Pour one pint boiling water over two tablespoons whole flaxseed, when cool strain and add the juice of two lemons, and two tablespoons honey. Used for coughs, colds and suppressed urine.

BEEF TEA.

Cut one pound lean beef in pieces, cover tightly in a bottle, placed in a pot of cold water. Heat slowly to a boil, which should be continued steadily four hours. When salted it is ready for use. It is a mild stimulant, but not very nourishing, and a patient confined to it *long* will slowly starve.

RICE GRUEL.

Steep two tablespoons rice slowly in one quart water, one hour. Strain, and add salt and a little cream.

CORN TEA.

Common corn parched brown. Grind it, and pour on boiling water. Can be used with or without cream. Used in nausea, vomiting and diarrhoea.

BRAN GRUEL.

Bran of white wheat, one pint. Boil half an hour in three pints water. Strain, and salt it. May be thinned and flavored with lemon juice.

CORN MEAL OR "WATER GRUEL."

Wet one tablespoon sifted corn meal in cold water. Prepare one quart boiling water in a gruel pan. Stir one spoonful of this cold batter into the boiling water, let it boil up, then add another, stirring thoroughly, and so on until the gruel is thick enough. Let it boil hard twenty minutes or longer. Salt and add a little cream.

Gruel can be made of Graham the same way.

MILK PORRIDGE.

Into one quart boiling *milk* stir one and a half tablespoons flour, wet in cold water. Salt to taste. Can be made of "whole-wheat flour," arrow root, corn-starch, etc.

BUTTERMILK.

For some forms of dyspepsia, in fevers, and in cases of diabetes buttermilk is an excellent food. May be sealed like fruit in glass jars and kept some time.

OATMEAL GRUEL.

Two tablespoons oatmeal in one quart boiling water. Sift in slowly and boil one hour, then strain and season.

HOT MILK.

Reduce the milk by adding *one-tenth* water. Heated in a double boiler to 110° F., or as hot as one can sip it slowly, it is a most valuable drink for *any invalid*. Especially would it be well for nursing mothers to try it, instead of the beer or porter so often ignorantly recommended to them. By its means mothers have been enabled to gain flesh during the nursing period, which usually is such a draught upon the strength and flesh.

CHICKEN BROTH.

Boil the dark meat of half a chicken in one quart of water with little rice or barley. Take off the fat and use as soon as the rice is well cooked. Add bits of brown toast.



MACARONI SOUP.

Break into small pieces a handful of macaroni. Boil one hour. Strain two cups stewed tomatoes, and add to it, with one cup of cream just before serving.

FARINA SOUP.

One half cup of farina, half cup of cream or one beaten egg, added to any soup stock, and boiled gently half an hour.

TOMATO SOUP.

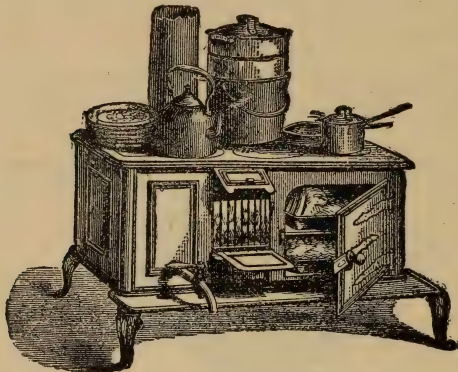
One quart water, one pint tomatoes heated to boiling. Thicken with Graham flour—three tablespoons mixed with cold water. Add one quart of milk and stir until it boils.
Season.

LEMON JELLY.

Stir into one pint of boiling water two tablespoons corn-starch, wet in cold water. Add part of a cup of sugar and juice of two lemons, with a little grated rind. Set in moulds to cool.

Another Recipe for Lemon Jelly.

Dissolve one ounce of gelatine in one quart water. Let it come to a boil in a saucepan. Add juice of three lemons, a little grated rind, and one cup of sugar, pour into moulds, and set on the ice to cool.



How to Cook All Kinds of Relishes for the Sick.

• • • From Tokology. • • •

CRACKED OR ROLLED WHEAT.

Cracked wheat should be stirred into boiling water and cooked in a double kettle *3 hours*. Salt and serve either hot or cold in moulds with fruit sauce, or cream and sugar. Rolled wheat may be cooked the same way, only it does not require to cook so long.

Do not soak in cold water, but stir into *boiling* water, as *all* the grains should be. Wheat is excellent for constipation or biliousness.

INDIAN MEAL MUSH.

Cornmeal stirred into boiling water slowly and cooked thoroughly *one hour*—not less.

OATMEAL MUSH.

Prepared the same as wheat with the same distinction between the cracked oats and the rolled. It should not be stirred while cooking.

GRAHAM MUSH.

Prepared the same as above. Let it boil ten minutes, then beat thoroughly before taking up. Serve with fruit juice, or cream and sugar.

FARINA MUSH.

Half a cup farina, one quart boiling water. Cook fifteen minutes in double kettle without stirring; add half a cup of cream just before removing from fire.

Serve with stewed fruit or fruit juice.

WHEATLET MUSH.

Use water or equal parts milk and water. Salt to taste. Have it BOILING hot, then sprinkle in wheatlet enough to make a thin pudding. Boil hard for five minutes, then set it back ten minutes to cook slowly.

WHEATLET PUDDING.

Break up cooked wheatlet, add milk enough to make a thin pudding. Two eggs, currants, raisins to suit. Brown in a moderate oven.

WHEATLET PUDDING.

In a deep pudding dish put layers of cold cooked wheatlet, (cracked wheat may be used,) and tart apples sliced thin. Sugar to taste. Raisins if desired. Fill the dish thus having wheatlet at the top. Bake until well done and browned.

Rice and apples may be prepared the same way.

RICE AND RAISINS.

Boil together, one cup rice, half cup raisins, one cup sweet milk, in three cups boiling water. Serve warm or cold with cream or fruit sauce.

RICE SNOW BALLS.

Boil two cups rice two hours in two quarts water and one pint of milk. Mould in small cups. Serve with boiled custard or fruit sauce.

RICE OMELET.

Two cups boiled rice, one cup sweet milk, two eggs. Beat with the egg beater, and put into a hot buttered skillet. Cook slowly ten minutes, stirring frequently.

HOMINY.

One cup hominy, three and a half cups boiling water. Salt. Cook four hours in a double kettle.

RICE AND BERRY PUDDING.

Work together two cups cold rice and two cups sweet milk. Then stir in the beaten yolks of two eggs *with* one-third cup of sugar, also the well whipped whites. Stir in two cups blueberries, currants, strawberries, seeded cherries, or chopped apples. Bake one hour in a pudding dish, set in a pan of boiling water. Serve warm or cold with or without cream.

BOILED RICE.

Two cups of rice to three pints boiling water. Salt to taste. Cook in double kettle four hours.. The Japanese method of cooking rice is to cover a dish tightly and cook in a steamer with only a very little water in the rice. Each kernel turns out separate, and bursts open like a mealy potato.

GRAHAM MUFFINS.

Stir together one pint new milk and one pint graham or "entire wheat" flour. Add one beaten egg and bake in *hot* muffin rings. Salt must not be used with any bread that is made light with egg.

BEST GRAHAM BISCUIT.

Make a thick Graham mush as above. Take it out on the moulding board, and knead into it more graham flour, roll about an inch thick and cut into biscuits, and bake in a hot oven.

LIGHT GRAHAM BISCUIT.

Make the dough of Graham yeast, beat a trifle stiffer, roll and cut into biscuits. When light bake thirty minutes.

BOSTON BROWN BREAD.

Three cups Graham flour, one cup cornmeal, one cup molasses, two cups sweet milk, one cup sour milk, one teaspoon soda. Steam three hours, then bake until brown.

OATMEAL SNAPS.

Mix one cup sweet cream and three tablespoonfuls sugar; add fine oatmeal until stiff; knead slightly. Roll to the thickness of an eighth of an inch. Cut in shapes and bake crisp in a moderate oven.

GRAHAM FRUIT CRACKERS.

Make a stiff dough of equal parts Graham and white flour, two-thirds cup sweet cream, three-fourths teaspoonful of Baking Powder, (or one-fourth teaspoon soda to one half of cream of tartar). Roll out thin, cover thickly with dried currants. Lay on another sheet of dough and pass the rolling pin over it. Cut in shapes. Prick deeply. Bake in a moderate oven.

GRAHAM WAFERS.

Mix Graham flour with pure cold water. No salt. Roll very thin, cut in squares and bake quickly. These will keep months in a dry place and are excellent for dyspeptics. May be heated over before eating.

GRAHAM GRIDDLE CAKES.

Sour milk or buttermilk with just enough soda to make it bubble a little. One egg well beaten, and Graham flour stirred in to make a batter. Excellent with maple syrup for constipation.

MILK TOAST.

Toast graham bread or gems split in two. Boil one pint of milk and half a cup cream. Thicken with one teaspoon cornstarch. Salt to taste. Pour over the toast and serve hot.

OYSTER TOAST.

Pour stewed oysters over graham gems or bread toasted. Excellent for breakfast.

Codfish cooked in milk is also excellent on toast. Also stewed tomatoes.

EGGS ON TOAST.

Soften brown bread toast with hot water. Serve on a platter with poached or scrambled eggs. Add salt, butter and a little cream. Set in the oven to warm just before serving.

ASPARAGUS ON TOAST.

Stew tender asparagus thirty minutes. Add half a cup of cream, salt and butter to taste. Turn over graham toast.

BOILED EGGS.

Eggs furnish the most perfect food as well as milk. They should never be boiled hard. Place in boiling water and set back *ten minutes*, and they will be cooked to perfection and easily digested.

EGGS POACHED IN MILK.

One cup milk, half a cup of water, when boiling break in six eggs. Cook slowly and serve on toast, well seasoned.

EGG OMELET.

Beat whites of six eggs. Beat yolks with three table-spoonfuls of milk and one of flour, stir in the whites lightly. Cook in a hot buttered skillet. When the edge is cooked turn over carefully. In two minutes more double together on a hot platter. Jelly may be spread between if desired. Use no salt.

GRAHAM GEM PUDDING.

Break up six cold gems into small pieces, and pour over them a pint of hot water and half a cup of sugar. Stir in six large tart apples, cut in thin slices.

Bake brown.

APPLE TAPIOCA PUDDING.

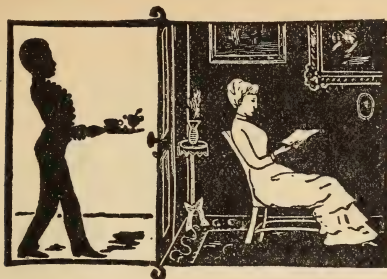
Soak a cup of tapioca in a quart of warm water three hours. Stir in lightly six tart apples sliced thin, add half a cup of sugar, and bake in a pudding dish.

Serve with whipped cream, warm or cold.

ORANGE PUDDING.

Pare and slice five large oranges, removing seeds. Lay in a deep dish and sprinkle with sugar, let them stand two hours. Make a custard of one pint milk, yolks of three eggs and two tablespoons corn-starch; when cool pour over oranges. Beat the whites with two tablespoons powdered sugar, and place on top.

Brown quickly in the oven.



BROILED OYSTERS.

Put large oysters on a toaster. Hold over hot coals until heated through. Serve on toast moistened with cream. Very grateful in convalescence.

PIE FOR DYSPEPTICS.

Four tablespoons of oatmeal, one pint of water, let stand till the meal is swelled. Then add two large apples, pared and sliced, a little salt, one cup of sugar, one tablespoonful of flour, nutmeg if desired. Bake in a buttered dish, when well mixed together. Makes a most delicious pie, which can be eaten with safety by the sick or well.

APPLE SNOW.

Bake tart apples till soft and brown. Remove skins and cores. When cool beat them smooth and fine. Add half a cup of granulated sugar and the white of one egg.

Beat till the mixture will hold on your spoon. Serve with whipped cream or soft custard.

BAKED PIE PLANT.

Cut pie plant into a pudding dish. Sprinkle over it a cup of sugar, and cover with bread crumbs. Bake in a quick oven. Pie plant may be steamed with sugar and make a nice sauce.

FRUIT ICE.

Apples, pears, pineapples or any fruit grated fine, sweetened to taste and frozen, are delicious. Useful in fever or inflammation.

SCALLOPED TOMATOES.

Bake in a pudding dish alternate layers of tomatoes (fresh or canned) and bread crumbs. Seasoned well. Have the top layer of tomatoes



Practical Methods and Receipts for the Care of Kitchen Utensils.

1. Attention to details is very necessary.
2. Sand or bath brick is excellent in cleaning wooden articles, floors, tables and the like.
3. If you use limestone water, an oyster shell in the tea kettle will receive the lime deposit.
4. Boil in the coffee pot, occasionally, soap, water and washing soda. It should always be bright to insure good coffee.
5. Pans made of sheet-iron are better to bake bread and cake in than those made of tin.
6. If skillets are very greasy, a little sal soda in the water will neutralize the grease, and so make them much easier to wash.
7. Bottles and cruets are cleaned nicely with sand and soap suds.
8. Iron pots, stoneware jars and crocks should have cold water and a little soda placed in them on the stove and allowed to boil, before using them.
9. Never allow the handles of knives to be placed in hot water.

10. A discolored brass kettle can be cleaned nicely by scouring it with a little vinegar and salt and washing it well afterwards with hot water and soap.

11. Scrape the dough from your rolling pin and wipe with a dry towel, rather than wash it.

12. Steel or silver may tarnish in woolen cloths. A chamois skin or tissue paper is very much better.

13. Don't put your tinware or iron vessels away damp, always dry them first. And scald out your woodenware often.

14. Don't use a brass kettle for cooking until it is thoroughly cleaned with salt and vinegar.

15. Don't allow coffee or tea to stand in tin.

16. Don't allow knives with wooden, horn or bone handles to lie in hot water, wash the blades in as hot water as you please, but keep it off the handles as much as possible.

17. Don't heat new iron vessels too quickly. Heat them gradually, and they are not so liable to crack.

Household Measures and Weights.

Below we give the weights and measures in ordinary use among housekeepers :

2 teaspoonfuls equal 1 tablespoonful.

2 tablespoonfuls equal 1 ounce.

16 tablespoonfuls equal 1 cupful.

2 cupfuls equal 1 pint.

1 pint equals 1 pound.

16 ounces equal 1 pound.

4 gills equal 1 pint.

2 pints equal 1 quart.

4 quarts equal 1 gallon.

An ordinary tumblerful equals 1 cupful.

1 quart flour equals 1 pound.

8 or 10 ordinary sized eggs equal 1 pound.

1 tablespoonful salt equals 1 ounce.

4 tablespoonfuls equal 1 wine glass.

4 wine glasses equal 1 coffee cupful.

CAUTION FOR CANNED FRUITS.

Never allow the contents of a tin can of fruit, or canned goods of any kind, to remain in the cans after they are opened.



HOW TO MAKE MEAT TENDER.

(A NEW METHOD.)

It is well known that meat must be kept some time after killing to make it tender. In winter, a large piece of beef or mutton will keep for six weeks if hung in a dry, cool place. Indeed, this is the time allowed in England for the Christmas "shoulder of mutton," and every few days it is rubbed over with salt and vinegar. In summer, unless the butcher will keep the meat for you, you must resort to other means.

A tough piece of meat may be laid in not too strong vinegar for three or four days in summer and twice as long in winter, adding to the vinegar such spices as you may like. To soften a tough steak pour a few spoonfuls of vinegar on and let stand for twelve or twenty-four hours. This method has long been recommended and is to some extent used among us; the foreign cook employs sour milk for the same purpose and with even greater success; but this must be changed every day and at the end of the time well washed from the meat.

BAKED MEAT.

To bake meat heat some beef fat in your dripping pan, put the roast into it and with a fork stuck in the fat part turn in rapidly until it is browned on all sides. Then put it into a hot oven, basting often, cook 12 to 15 minutes to the pound. Add *no* water. Season with salt and pepper when half done. Before that the salt will toughen it. The roast is done when the center is red instead of blue as at first.

BROILED MEAT.

To broil meat turn it once or twice over *hot* coals, then butter and lay in a pan to finish in the oven. This prevents burning the outside in order to cook well the inside of steak or chop.

MEAT CROQUETTES.

When so good a dish as this can be made out of soup meat, it is worth a little trouble.

INGREDIENTS: 2 cups of chopped beef, 1 tablespoon butter, 1 tablespoon flour, 1 egg, $1\frac{1}{2}$ a lemon or 1 tablespoon vinegar, a few gratings of nutmeg and $1\frac{1}{2}$ cup of stock or milk.

Cook the flour in butter and add the stock or milk and seasoning, then the beef, and cook, stirring all the time till the mass cleaves from the side of the kettle. Let it get cold, then make it into little egg shaped balls, let them dry a little, roll in beaten egg and bread crumbs and fry in boiling fat.

To vary—add $\frac{1}{3}$ as much chopped salt or fresh pork as you have meat.



FORE LOIN OF PORK.



HIND LOIN OF PORK.

A NEW METHOD FOR FRESHENING BACON.

Cut the slices ready for frying. Let them soak about twelve hours in sour milk. Wash thoroughly and fry in hot lard or drippings. The bacon will be very much better and more palatable than if freshened in water.

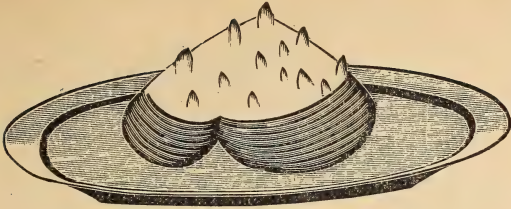


MEAT AND SOUP.

1. To make soup crack the bones and cut up the meat in small pieces and put on the stove in *cold* water, cook slowly several hours, cool, remove the fat and rewarm adding flavors to taste before serving. Do not remove the scum which rises while boiling as this is the most nourishing part. The soup meat may afterwards be chopped, moistened with some of the soup, flavored with spices. lemon, etc., and pressed while warm and make nice cold meat for tea.

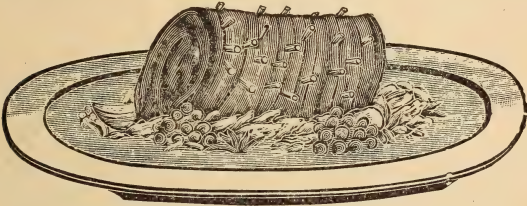
BOILED MEAT.

2. To *boil meat* the opposite is true. Put it into *boiling* water and boil *hard* or ten or fifteen minutes, then reduce the heat a little and cook slowly until done. This retains the juices in the meat instead of drawing them out as for soup.



STUFFED BEEF'S HEART.

If fire is no object, you may boil a beef's heart, it will take all day. Put into cold water and bring slowly to the simmering point and keep it there. Next day it may be stuffed with well-seasoned bread crumbs and baked three-quarters of an hour.



HOW TO SERVE ROAST BEEF A SECOND TIME.

Heat the gravy, put the roast in it. After trimming it into shape again, cover closely and put into a hot oven for ten minutes, or less, according to size of piece.

Or, cut in slices and lay in hot gravy, only long enough to heat them through.



HAM CAKES.

Take one cup finely chopped boiled ham, two cups of breadcrumbs, two eggs, pepper and salt, and enough milk to make quite moist.

To USE. First: Fry on a griddle in small spoonfuls, and turn as pancakes.

Second: Use mashed potatoes instead of breadcrumbs, and fry as above.



SAUSAGE.

4 pounds pork, lean ; $1\frac{1}{2}$ pounds pork, fat ; 10 easpoonfuls sage ; 5 teaspoonfuls pepper ; 5 teaspoonfuls salt. Grind or chop very fine the pork. Mix the seasoning in with your hands, taste to be sure that all is right, and pack down in stone jars, pouring melted lard to the thickness of about one inch on top.

SAUSAGE.

2 pounds lean pork, 2 pounds lean veal, 2 pounds beef suet. peel of half a lemon, 1 grated nutmeg, 1 teaspoonful black pepper, 1 teaspoonful cayenne pepper, 5 teaspoonfuls salt, 3 teaspoonfuls sweet marjoram and thyme, mixed, 2 teaspoonfuls of sage, juice of a lemon. Grind the meats and thoroughly mix in the other ingredients, Stuff in cases.



BOLOGNA SAUSAGE—COOKED.

Mix well together and let boil twelve hours : 5 pounds beef finely chopped, $1\frac{1}{4}$ pounds pork finely chopped, 2 teaspoonfuls of powdered cloves, 1 teaspoonful of powdered mace, $1\frac{1}{4}$ ounces of ground black pepper, salt to taste. Stuff this mixture into muslin bags eight or twelve inches long and three inches in diameter. Lay them in a ham pickle four or five days, and then smoke them six or seven days. Hang up in a dark place.



Showing the Sections into which Pork should be cut.

HOW TO PICKLE BEEF.

A. S. BARNARD'S CELEBRATED RECEIPT.

To 3 gallons of water add 8 pounds of salt, 2 ounces of saltpetre and one pint of molasses—same proportion for larger quantities.

METHOD.—Pack the meat without salt. Prepare the brine as above, scald it, skin it, let it cool and cover the meat.

HOW TO PICKLE HAMS.

Take to 100 pounds of ham, 4 quarts of fine salt, $\frac{1}{2}$ pound of saltpetre and 1 quart of molasses and mix thoroughly.

METHOD.—Rub the hams with the mixture and pack them closely. Put the remaining mixture upon them and let them lie 10 days, then turn them and let them lie 20 days—take them up and smoke them with corn cobs.

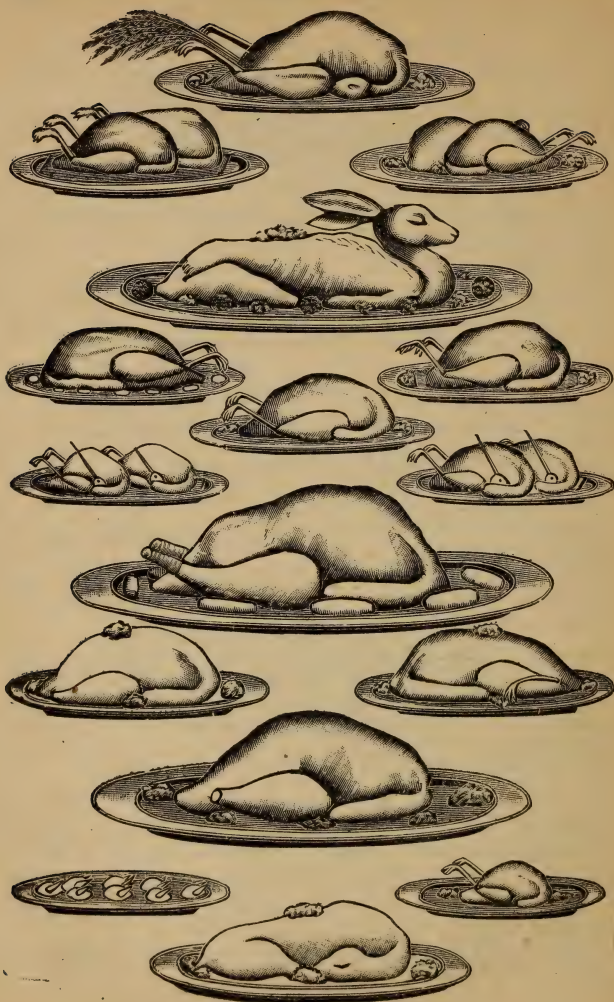
HOW TO PACK PORK.

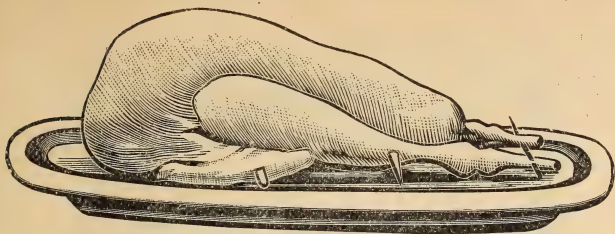
Pack the pork closely together and put in plenty of rock salt, then pour on cold water to cover the meat.

HOW TO PICKLE TONGUES.

For each tongue take: 6 oz. of salt; 2 oz. of bay salt; 1 oz. of saltpetre; 3 oz. coarse sugar.

Cloves and allspice to taste, keep the tongue in the above pickle two weeks or 20 days.





PREPARED FOR ROASTING.

How to Cook All Kinds of Poultry.

1. Poultry should never be eaten in less than 12 hours after it has been killed ; but it should be picked and drawn as soon as possible.

2. After picking and drawing chickens it is well to wash them in three waters adding a little soda in the last water.

3. When buying turkeys notice carefully the legs ; if they are rough and reddish the bird is old ; if smooth and black it is young.

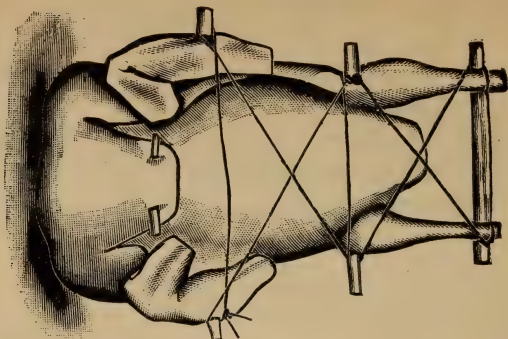
4. If the fowl is old or tough, a little soda in which it is boiled will make it tender.

5. A pan of water placed in an oven with a roasting fowl will keep it from scorching.

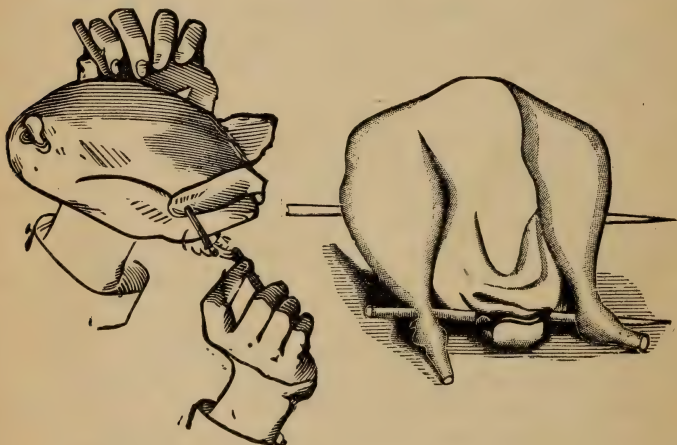
6. Wild game first fried in butter before boiling will greatly improve the flavor.

7. Chickens, unless of the very tenderest spring brood, and Ducks and Turkeys are far better when dressed, stuffed, and steamed until tender, then brown nicely in the oven. This makes an easy Sunday dinner as all the labor may be done on Saturday with only a half hour s cooking Sunday.

8. Young fowls should never be fried but always broiled. Split down the back, butter and broil over clear coals. They may be finished in the oven after four or five minutes broiling. The flavor is finer and they digest much easier than when fried. Use the bones for soup.

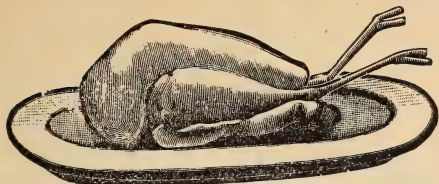


9. By using sticks and pinning and tying the fowls as in the above illustration it will bake and look much nicer when served.



ROASTED TURKEY.

Stuff a nicely cleansed turkey with dressing, made of two pints of bread crumbs, one cup of butter, and moistened with water; to this add one egg, and salt and pepper to taste, and also a pint or more of oysters if convenient. Mix this well before using. Rub butter over the outside of the turkey, place in the dripping pan, with a little water and baste frequently while cooking.



SMOTHERED CHICKEN.

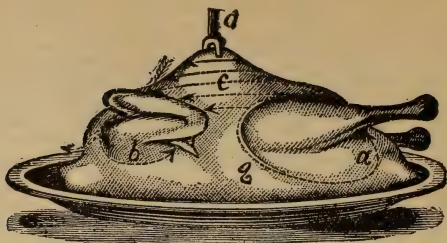
Prepare the chicken as you would for boiling it whole, and place, with a little water, into a dripping pan, after seasoning it with butter, pepper and salt. Put thin slices of tomato over it, dredge with flour, cover it very closely to keep in the steam, and place in the oven to cook until tender. When done, remove the cover, to let brown nicely. Make a nice gravy from the drippings, to serve with them.

FRICASSEED CHICKEN.

Clean, wash, and cut up a pair of young chickens. Lay in clear water for half an hour. If they are old, you cannot brown them well. Put them in a saucepan, with enough cold water to cover them well, and set over the fire to heat slowly. Meanwhile, cut half a pound of salt pork in strips, and fry crisp. Take them out, chop fine, and put in the pot with the chickens. Fry in the fat left in the frying-pan one large onion, or two or three small ones, cut into slices. Let them brown well, and add them also to the chicken, with a quarter teaspoonful of allspice and cloves. Stew all together slowly for an hour or more, until the meat is very tender; you can test this with a fork. Take out the pieces of fowl and put in a hot dish, covering closely until the gravy is ready. Add to this a great spoonful of walnut or other dark catsup and nearly three tablespoonfuls of browned flour, a little chopped parsley, and a glass of brown Sherry. Boil up once; strain through a cullender, to remove the bits of pork and onion; return to the pot, with the chicken; let it come to a final boil, and serve, pouring the gravy over the pieces of fowl.

DEVILED TURKEY.

Take the first and second joint of a roast turkey and cut deep gashes in them, and into these put a little mixed mustard, a little salt and cayenne pepper. Lay on a broiler until heated through, then place on a very hot dish, and spread with butter.



HOW TO CARVE TURKEYS, DUCKS. CHICKENS, Etc.

1. It is a very easy matter to divide and separate the parts of a baked fowl, but it is another matter to do it easily and elegantly.

2. Every man and woman, boy and girl, should be familiar with the art of carving.

3. A good skillful carver places the fork in the fowl as shown above, and does not remove it until the whole is divided.

4. First cut off the leg and wing on one side and then shave off the breast in nice thin slices. Then turn the bird and cut the other side in the same manner.

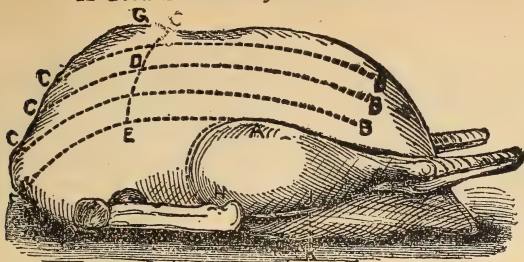
5. Never rise from your seat while carving.

6. To hit the joints while carving and separating the wings and legs, the bird should be thoroughly studied before cooked, and the lesson learned as to the location of the joints, after which no trouble will ever be experienced in separating any of the joints or parts in the fowl.

7. In a turkey the thigh should be separated into three portions; one with the bone, and two without, and a piece of this, with a slice from the breast, will be sufficient for one person, unless it is known that they do not prefer any of the parts thus separated.

8. The wing may be divided in a similar way, unless preference is otherwise expressed.

9. Always lay the pieces with skin side up and add a spoonful of stuffing.



SHOWING THE SECTIONS IN WHICH THE BREAST IS TO BE CUT.

10. If there are old persons at the table, the choice part just below the thigh, which is easily removed, should be given them.

11. The best way to learn to carve is to watch a good skillful carver, and then practice at every opportunity offered.

STEWED CHICKEN AND DUMPLINGS.



Cut a chicken into pieces suitable for serving, wash it, and put it into a deep stew pan, add three pints of water. Put on to boil, in another sauce pan, three slices of carrot, three of turnip, and one large onion, cook slowly for half an hour, then take up the vegetables in a strainer and place it in a stew pan with the chicken and dip some of the water into it. Mash the vegetables with the back of a spoon and rub as much as possible through the strainer. Now skim two spoonfuls of chicken fat and put it into the pan in which the vegetables were cooked. When boiling-hot, add three tablespoonfuls of flour, stir it in with the chicken, and simmer until tender.

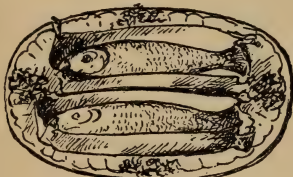
Season well with pepper and salt and butter. The stew must not boil hard, but only simmer about two hours. Ten minutes before serving, put it on the front of the stove and put the dumplings in, and cook ten minutes.



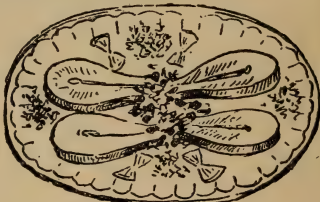
WHITING.



MACKEREL.



RED MULLET IN CASES.



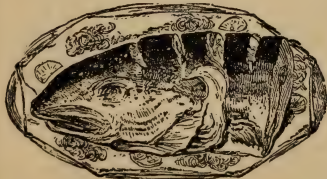
SALMON CUTLETS.



BOILED SALMON.



STEWED EELS.

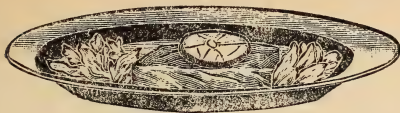


BOILED COD.



FILLETED SOLES.

VARIOUS DISHES OF FISH.



How to Prepare and Cook All Kinds of Fish.

HOLLANDAISE SAUCE.

Put two tablespoonfuls of butter into a frying pan; when melted, add two tablespoonfuls of flour, stir until smooth, then pour in two cupfuls of cold water and stir steadily until it thickens, add a little salt and pepper, take from the fire and add the beaten yolks of two eggs and the juice of half a lemon, stirring steadily.

FRIED WHITEFISH.

Split a large whitefish and place in a dish with salt and pepper, squeeze over it the juice of two lemons and let it stand for an hour. Drain them, flour them all over, dip in egg and fry to a light brown. Serve with the above sauce.

BOILED FISH.

Unless you have a fish kettle the fish must be pinned in a stout piece of white cloth, and not boiled hard but simmered. Serve with egg sauce.

HOW TO USE CANNED SALMON.

SALMON ON TOAST.

Flake the fish, season with pepper and salt, and heat it with a little milk or cream. Have some hot milk in a flat pan. Toast several slices of bread, which dip quickly into the hot milk, place on a hot dish, spread with butter and pour over it the heated fish.

SALMON CROQUETTES.

One can of salmon; one egg, well beaten; one-half cup of fine bread crumbs; salt; cayenne pepper; nutmeg; juice of half a lemon. Drain off the liquid and mince the fish. Melt and work in the butter, season, and if necessary moisten with a little of the liquid; add the crumbs. Form the parts into rolls, which flour thickly, and stand them in a cold place for an hour. Fry in hot fat and serve on a hot platter, garnished with fresh parsley or lettuce.

SALMON SALAD.

One cup of cold salmon minced and mixed with an equal quantity of chopped celery or cabbage. Line a dish with lettuce leaves, turn into it the mixed salmon and celery or cabbage, and over all pour a dressing made of two tablespoonfuls of oil, three tablespoonfuls of vinegar, salt and pepper. A mayonnaise dressing may be used, but with salmon the plain dressing is to be preferred.

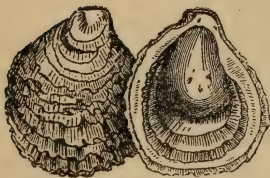
FISH BALLS.

The favorite dish, is prepared by adding to cooked codfish, finely shredded, a like quantity of mashed potatoes. Make into balls, season and fry on a griddle or in boiling fat.

Any other fish can be used in the same way.

CODFISH SOUP.

Cook one tablespoonful of flour in one tablespoonful of butter. Add one and one-half quarts of milk, or milk and water—and when it boils stir in one teacup of cold boiled codfish that has been freed from skin and bones and then chopped fine. Add salt and pepper to taste.

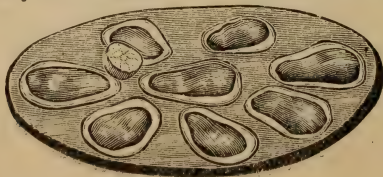
OYSTERS.**OYSTER SOUP.**

THE EDIBLE OYSTER.

Put the liquid of one quart of oysters and two pints of water in a kettle; let it boil and skim it, then add two quarts of milk and one dozen rolled crackers with two tablespoonfuls of butter; put in a little salt and pepper. When near boiling point put in the oysters. When it begins to boil take up at once.

OYSTERS ON TOAST.

Put in a stew pan one quart of oysters with their liquid, when they come to a boil put in one pint of milk, one tablespoonful of butter mixed with two tablespoonfuls of flour and a little salt and pepper. Let it boil up and then pour over slices of nicely browned and buttered toast. Serve hot.



OYSTER PATTIES.

Line patty pans with paste, put a cover of paste over and pinch the edges; bake in a quick oven, take as many large oysters as you have patties, stew them in their own liquid, then cut in pieces and add one tablespoonful of flour, the same of butter, the grated rind of one lemon, a little salt, pepper and minced mace, and three tablespoonfuls of cream; mix together well and into each of the patties put a tablespoonful of the mixture. Serve hot.

LOBSTER CUTLETS.

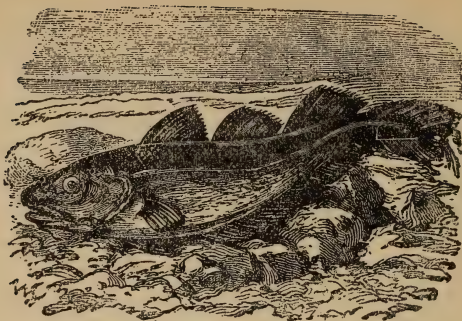
MADE FROM CANNED LOBSTERS.

Mince the meat of the lobsters fine, season with salt and spice, melt a piece of butter in a sauce pan, mix with it one tablespoonful of flour, add the lobster and a little finely chopped parsley, add a little stock also, and let it come to a boil; remove from the fire and stir into it the yolks of two eggs, spread this mixture in a shallow pan; when cold cut into cutlets, shape, dip carefully in beaten eggs, then in cracker crumbs and fry to a rich brown color in hot lard.

BAKED SALMON.

One can of salmon, two eggs, one tablespoonful melted butter, one cup bread crumbs, pepper, salt and minced cucumber pickle. Drain the liquid from the fish and set aside for the sauce. Pick the fish to pieces, then work in the melted butter, seasoning, eggs, and crumbs. Put in a buttered bowl, cover tightly and set in a pan of boiling water. Cook in a hot oven one hour, then stand the bowl in cold water for a moment to loosen the pudding, and turn out on a hot dish.

For the sauce make a cup of drawn butter, to which add the liquid from the can, a beaten egg, pepper, salt, a chopped pickle and some minced parsley cabbage or lettuce. Boil up and pour over the fish or serve in a gravy tureen,



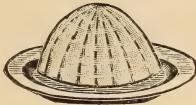
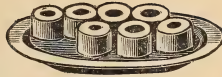
THE COD.

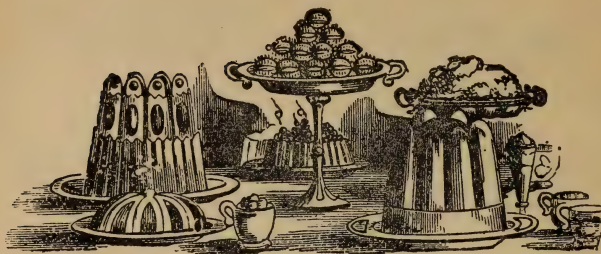
BROILED SALT CODFISH.

Take a thick piece of the fish and soak it 24 hours, changing water once or twice; then wipe dry and broil to a nice brown, over a clear, but not too hot fire. Take up on a hot platter, spread on it a little butter, or pour over it a few spoonfuls hot cream. With mealy baked potatoes and nice brown bread this makes a breakfast which a convalescent can enjoy.

A CROCK OF CODFISH.

Pick the codfish all up as you would to cook and pack down in a jar; cover with a thin muslin cloth and cover that with salt. The fish is then ready for use at a moment's notice, and not one particle will spoil or dry up to waste, if it is kept in a cool place.





How to Make all Kinds of Cakes, Cookies, Doughnuts, Etc.

A FEW PRACTICAL RULES.

Powdered sugar is better than granulated for baking cake. It dissolves more quickly.

Always remember that baking powder and sweet milk go together, and sour milk and soda.

Do not use butter to grease baking pans. The salt in the butter makes the cake stick to the pan. Always use fresh lard.

If eggs are kept in a cool place they always beat better when broken.

Continually opening the oven door makes a cake fall. The oven door should never be opened for at least ten minutes after placing the cake into it.

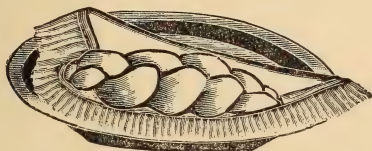
If molasses is used in cakes they should never be baked in a hot oven as they will burn very quickly.

WALNUT CAKE.

H. B. J. writes: Take 2 teacupfuls of white sugar, $\frac{3}{4}$ teacupful butter, 1 teacupful milk, 3 teacupfuls flour, whites of 8 eggs, 2 teaspoonfuls baking powder, FILLING: Make a boiled frosting and stir in 1lb chopped English walnuts.

SPONGE CAKE.

One cupful of sugar, two cupfuls of sifted flour, half a cupful of cold water and three eggs, with a teaspoonful of baking-powder; flavor with lemon; bake in a moderate oven.



COFFEE CAKE.

Work in a quart of bread dough, a tablespoonful of butter, half a cupful of sugar, with one cupful of dried currants; add flour to make dough, make in cake, shake, rub with melted butter, put in a pan and let rise. Rusks.—In one pint of milk dissolve one yeast cake, add three eggs, one cupful of sugar and beat together; sift in flour to make dough, add two ounces of butter; let rise, work well, make in rusks, put in a pan to lighten, bake in a quick oven; sprinkle with sugar.

Lemon Cake.



Beat to a cream: 1 cup of sugar, $\frac{1}{2}$ cup of butter. Then stir in: 4 well beaten eggs, 1 grated lemon, 2 cups of flour. Bake in greased pans, in a quick oven.

Economy Cake.

1 cup of sugar, 1 cup of buttermilk, 1 egg, butter the size of an egg, 2 cups of flour, 1 teaspoonful of soda.

Boston Cakes.

Beat to a cream: 1 teacup of butter, 3 cups of sugar. Then add: 1 cup of cream or milk, 6 well beaten eggs, 4 teacups of sifted flour, a little salt, $\frac{1}{2}$ pound of currants, 1 teaspoonful of soda dissolved in one tablespoonful of milk. Bake in a moderate oven.

Marble Cake.—Light.

1 cup white sugar, $\frac{1}{2}$ cup of butter, $\frac{1}{2}$ cup of milk, whites of three eggs, 2 cups prepared flour.

Dark.

$\frac{1}{2}$ cup brown sugar, $\frac{1}{4}$ cup butter, $\frac{1}{2}$ cup molasses, $\frac{1}{4}$ cup milk, $\frac{1}{2}$ nutmeg, 1 teaspoonful cinnamon, $\frac{1}{2}$ teaspoonful allspice, $\frac{1}{2}$ teaspoonful soda, 2 cups flour, yolks of 3 eggs. Fill the pan with alternate spoonfuls of light and dark batter.



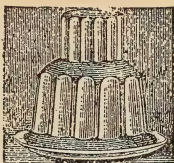
JELLY OF TWO COLOURS.

BREAD CAKE.

Into 2 teacupfuls of light bread dough, work with the hands $1\frac{1}{2}$ teacupfuls sugar, 1 of butter, half a teacupful of milk, 2 well-beaten eggs, 1 teaspoonful baking powder, nutmeg to taste and a teacupful seeded raisins. A little more flour may be needed. Place in pan it is to be baked in and let rise again, and when light, bake in a moderate oven 40 or 50 minutes.



PLAIN CAKE.



CORNFLOUR CAKE.



CAKE-MOULD.

SILVER CAKE.

One cupful of sugar, half a cupful of butter, the whites of three eggs, half a cupful of cornstarch, dissolved in nearly half a cupful of milk ; one and a fourth cupfuls of flour, half a teaspoonful of cream of tartar, one-fourth of a teaspoonful of soda, and vanilla or almond flavor. Beat the butter to a cream and gradually beat in the sugar. Add the flavor. Mix the flour, cream of tartar and soda together, and sift. Beat the whites to a stiff froth. Add the corn starch and milk to the beaten sugar and butter, then add the whites of the eggs and the flour. Mix quickly and thoroughly. Have the batter in sheets, and about two inches deep. Bake in a moderate oven for about half an hour. A chocolate frosting is nice with this cake.

GOLD CAKE.

One cupful of sugar, $\frac{1}{2}$ cupful of butter, the yolks of three eggs and 1 whole egg, $\frac{1}{2}$ cupful of milk, $\frac{1}{4}$ of a teaspoonful each of soda and cream of tartar, $1\frac{3}{4}$ cupfuls of flour. Mix the butter and sugar together, and add the eggs, milk, flavor and flour, in the order named. Bake the same as the silver cake. A white frosting is good with this cake.

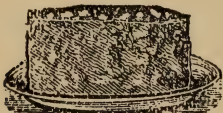
ANGEL CAKE.

The whites of 11 eggs, $1\frac{1}{2}$ cupfuls of granulated sugar, 1 cupful of pastry flour, measured after being sifted 4 times ; 1 teaspoonful of cream of tartar, 1 of vanilla extract. Sift the flour and cream of tartar together. Beat the whites to a stiff froth. Beat the sugar into the eggs, and add the seasoning and flour, stirring quickly and lightly. Beat until ready to put the mixture in the oven. Use a pan that has little legs at the top corners, so that when the pan is turned upside down on the table, after the baking, a current of air will pass under and over it. Bake for 40 minutes in a moderate oven. Do not grease the pan.

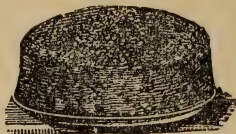


WATERMELON CAKE.

White Part.—One teacupful each of butter and milk, two teacupfuls sugar, three and one half teacupfuls flour, 3 teaspoonfuls baking powder, 1 teaspoonful extract of lemon and the whites of 8 eggs. *Red Part.*—One cupful red sugar, $\frac{1}{2}$ cupful butter, $\frac{1}{3}$ cupful milk, 2 cupfuls flour, 2 teaspoonfuls baking powder and a teacupful raisins; bake in a pan with a tube in the center. Place the red part around the center of the pan and the white around the outside of this. Frost when done.



FRUIT CAKE.



HOLIDAY CAKE.

A SMALL FRUIT CAKE.

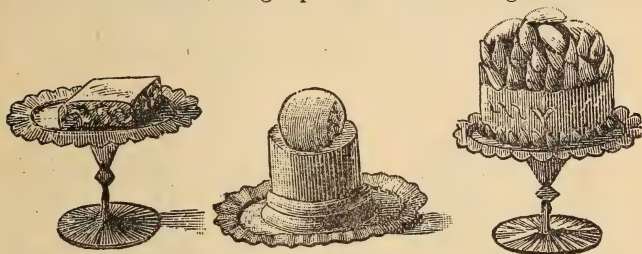
$\frac{1}{2}$ cup of sugar, $\frac{1}{2}$ cup of butter, 4 tablespoonfuls of molasses, $\frac{1}{4}$ of a teaspoonful of soda dissolved in it, 4 eggs, $\frac{1}{2}$ cupful of citron cut fine, $\frac{1}{2}$ pound of seeded raisins, $\frac{1}{4}$ pound of well washed currants and blanched almonds, 1 grated nutmeg, 1 tablespoonful each of cloves and cinnamon, 2 cups of sifted flour. Flavor with lemon essence, and at the very last add the whites of the eggs, well beaten. Bake one hour in a moderate oven.

COFFEE CAKE.

Mix quite stiff, and bake in a moderate oven for one hour: 1 cup of brown sugar, 1 cup of molasses, 1 cup of butter, 1 egg, 1 cup of strong coffee, 2 cups of raisins, $\frac{1}{2}$ ounce of powdered cloves, $\frac{1}{2}$ ounce of powdered cinnamon, $\frac{1}{2}$ ounce of soda, 1 grated nutmeg, 4 or 5 cupfuls of flour.

SUNSHINE CAKE.

This is made almost exactly like angel cake. Have the whites of 11 eggs and the yolks of six, $1\frac{1}{2}$ cupfuls of granulated sugar, measured after sifting; 1 cupful of flour, measured after sifting; 1 teaspoonful of cream of tartar and 1 of orange extract. Beat the whites to a stiff froth, and gradually beat in the sugar. Beat the yolks in a similar manner, and add to them the whites and sugar and flavor. Finally, stir in the flour. Mix quickly and well. Bake for fifty minutes in aslo woven, using a pan like that for angel cake.

**CITRON CAKE.**

Beat separately the whites and yolks of 4 eggs, 3 cups of sugar, 1 cup of butter, $\frac{1}{2}$ cup of sweet milk, 3 cups of flour, $2\frac{1}{2}$ teaspoonfuls of baking powder, $1\frac{1}{2}$ cups of chopped citron, rolled in flour. This is best baked in pans about twice as long as wide. The pan should be large enough so as to have the batter about $2\frac{1}{2}$ inches thick.

NUT CAKE.

2 cups of sugar, 1 cup of butter, 1 cup of milk, 3 eggs, 3 cups of flour, 2 teaspoonfuls of baking powder, 2 cups of any kind of nut kernels.

CHOCOLATE CAKE.

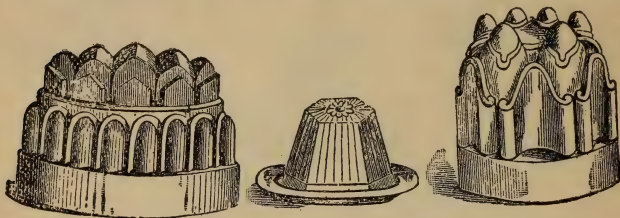
2 cups of sugar, $\frac{3}{4}$ cup of butter, 1 cup of milk, 2 cups of flour, 1 cup of corn starch, yolks of 5 eggs. Beat the butter and sugar to a cream, then put in the eggs, stirring them well together; add the milk and corn starch, then the flour, first mixing it with the baking powder. Bake in jelly tins. For the icing: $\frac{1}{4}$ cake of Baker's chocolate, $\frac{1}{2}$ cup of sweet milk, 1 teaspoonful of corn starch, 1 teaspoonful of vanilla. Grate the chocolate into the milk and dissolve it, heat the milk to the boiling point; stir the corn starch in a little cold milk, and add to the chocolate and milk.

SNOW CAKE.

Cream $\frac{3}{4}$ teacupful butter with 2 teacupfuls sugar; add 1 teacupful each of sweet milk and corn starch, 2 teacupfuls pour, $1\frac{1}{2}$ teaspoonfuls baking powder, and flavoring to taste; lastly add the well beaten whites of 7 eggs. Stir these in lightly and bake in a dish, preferably one with a pipe. Bake 40 to 45 minutes.

PUFF CAKE.

Beat to a cream $\frac{1}{2}$ teacupful butter and 1 teacupful sugar; add in the order named, the yolks of two eggs well beaten, $\frac{1}{2}$ teacupful milk, $1\frac{1}{2}$ teacupfuls sifted flour, the whites of two eggs beaten stiff, and 1 heaping teaspoonful baking powder, sifted in the last thing. Flavor with vanilla, and bake in a loaf.

*WHITE SPONGE CAKE OR "ANGEL FOOD."*

One-and-a-half cupfuls pulverized sugar, one cup flour, twelve whites of eggs, one teaspoonful cream of tartar, one teaspoonful flavoring.

DIRECTIONS FOR PREPARING.

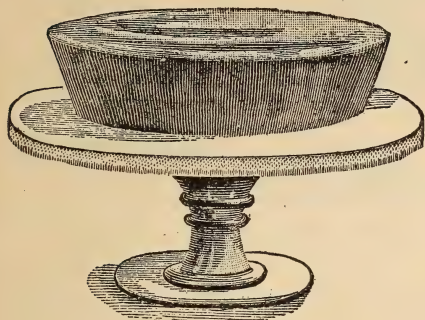
Sift the sugar and flour three times separately, then mix and stir in the well-beaten whites of twelve eggs. Stir the cream of tartar in with the sugar and flour before putting in the eggs. Add the flavoring and bake in a medium oven.

ORANGE CAKE.

Mix smoothly one teacupful granulated sugar with half a teacupful butter, add the well-beaten yolk of three eggs, $\frac{3}{4}$ cup of milk, a tablespoonful lemon juice, and $2\frac{1}{2}$ cups flour, with which is sifted 2 teaspoonfuls baking powder. Lastly add the whites beaten stiff. Bake in four layers. For a filling, to be put in when the cakes are cold, chop fine 3 or 4 peeled oranges, sweeten and spread them over 3 of the layers, cover these and the top layer with a soft boiled frosting made with the whites of the eggs, sweetened to taste and flavored with a little grated lemon peel. Pile these together adding frosting to sides as well as on top.

RELIABLE SPONGE CAKE.

Beat three eggs minutes, add $1\frac{1}{2}$ teacupfuls sugar and beat 5 minutes ;



SPONGE CAKE.

then stir in a teacupful flour with which is sifted one teacupful cream of tartar. Beat three minutes before adding $\frac{1}{2}$ teacupful of cold water in which is dissolved $\frac{1}{2}$ teacupful soda ; lastly stir in 1

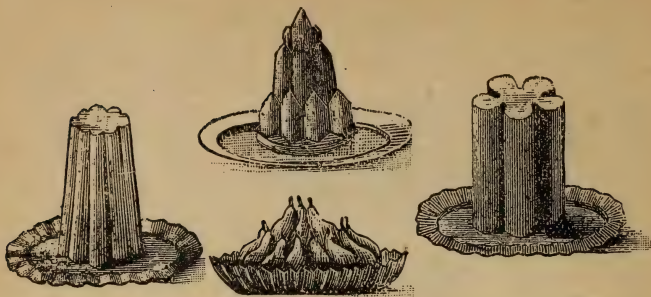
teacupful flour and mix thoroughly. Bake in a moderate oven.

COCOANUT CAKE.

Cream two cupfuls of sugar and half a cupful of butter together, sift in three cupfuls of flour with two teaspoonfuls of baking-powder, pour in a cupful of milk, flavor with lemon, and lastly, add the well-beaten whites of eight eggs. Bake in jelly-pans, and spread grated cocoanut and powdered sugar, mixed, between.

WHITE MOUNTAIN CAKE.

Cream one pound of sugar and a half a pound of butter together ; sift in one pound of flour with two teaspoonfuls of baking-powder, add half a cupful of milk and the stiffly-beaten whites of ten eggs. Flavor with bitter almond extract. Pour in cake-mold and bake 40 minutes.



Layer Cakes.

CREAM CAKE.

2 cups powdered sugar, $\frac{2}{3}$ cupful butter, 4 eggs, $\frac{1}{2}$ cupful milk, $\frac{1}{2}$ teaspoonful soda, 1 teaspoonful cream tartar, 3 cups flour. Bake in layers as for jelly cake, and when cold spread the following mixture between the layers: $\frac{1}{2}$ pint of milk, 2 small teaspoonfuls corn starch, 1 egg, 1 teaspoonful vanilla, $\frac{1}{2}$ cup sugar. Let the milk come to a boiling point, and stir in the corn starch wet with a little cold milk. Beat the egg and sugar together, take out a portion of the boiling mixture and gradually beat it into the eggs and sugar; return to the rest of the custard, and boil, stirring constantly until quite thick. When cool season with vanilla and spread between the layers.

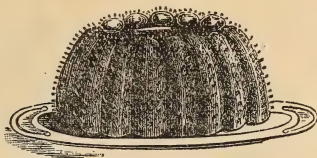
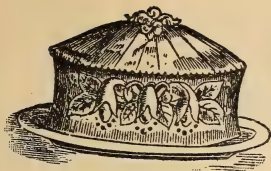
COCOANUT CAKE.

2 cups powdered sugar, $\frac{1}{2}$ cup butter, 3 eggs, 1 cup milk, 3 cups flour, 2 tablespoonfuls cream tartar, 1 teaspoonful soda. Bake in Jelly tins.

Filling.—1 grated cocoanut. To one-half of this add whites of three eggs, beaten to a froth, and one cup of powdered sugar. Spread between the layers. Mix the other half of the grated cocoanut with four tablespoonfuls powdered sugar, and strew thickly on top of cake.

JELLY CAKE.

Beat to a cream: 2 cups of sugar, $\frac{1}{2}$ cup of butter, then add three-quarters of a cup of milk, 1 large tablespoonful of baking powder, mixed in two and a half cups of flour. The frothed whites of eight eggs. Bake in jelly pans, and when cool, spread jelly between the layers.



STRAWBERRY CAKE.

Mix into a dough : 5 cups of flour, 1 teaspoonful of salt, 4 well beaten eggs, enough milk to make it roll nicely. Roll them, and place a crust in the bottom of a shallow pan, then a thick layer of strawberries sugared to taste. Cover with a thin layer of crust, then another layer of strawberries and sugar. Cover the whole with another layer of crust, and bake in a quick oven, twenty minutes.

CUSTARD CAKE.

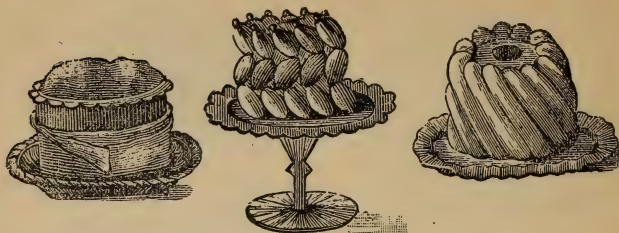
2 eggs, 1 cup of sugar, $\frac{1}{4}$ cup of water, 1 cup of flour, 1 heaping tablespoonful of baking powder. Bake in layers.

Custard.— $\frac{1}{2}$ cup of sugar, $\frac{3}{4}$ cup of milk. 1 tablespoonful of corn starch, butter the size of a hickory nut. Flavor with lemon. Boil until as thick as jelly. Spread between the layers when they are cool.

HICKORYNUT CAKE.

2 cups of sugar, $\frac{1}{2}$ cup of butter, 4 eggs, $4\frac{1}{2}$ cups of flour, 2 teaspoonfuls of baking powder. Bake quickly in jelly pans.

For the Filling.—Beat together ; 1 cup of sugar, 2 eggs, $\frac{1}{4}$ cup of corn starch, 1 cup of fine chopped hickorynut kernels, 1 pint of milk. Boil until a custard, and when cool spread between the layers of the cake.



How to Make All Kinds of Frosting.

BOILED FROSTING.

White of one egg beaten to a stiff froth, one cupful of granulated sugar, moistened with four tablespoonfuls of hot water; boil sugar briskly for five minutes, or until it “jingles” on the bottom of the cup when dropped in cold water then pour the boiling syrup on the egg in a small stream beating hard at the same time.

GELATINE FROSTING.

Dissolve a teaspoonful of gelatine in three-quarters of a cup of boiling water; strain, thicken with a cup of sugar, and flavor with lemon.

EVERY DAY FROSTING.

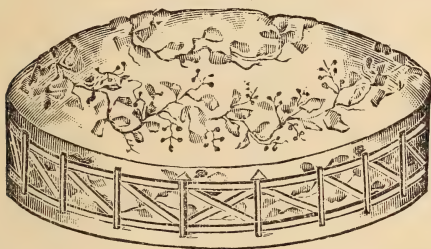
Beat the whites of three eggs stiff; add two and a half cups of powdered sugar gradually, beating briskly all the time. Flavor with vanilla.

FROSTING.

Beat the whites of two eggs to a stiff froth, add gradually a half pound of pulverized sugar, beat very thoroughly, flavor with lemon juice. To color a delicate pink, use the juice of strawberries, currants or cranberries or a very little cochineal.

FROSTING.

Whites of 4 eggs, 1 pound of powdered sugar, lemon, vanilla or other flavoring. Break the whites into a broad, cool dish. Throw a small handful of sugar upon them, and begin whipping it in with slow steady strokes of the beater. In a short time throw in more sugar, and keep adding it until it is all used up. Beat perseveringly until icing is of a smooth, fine and firm texture. If not stiff enough put in more sugar. Lemon juice whitens the icing.



PLAIN FROSTING.

Beat the white of one egg to a stiff froth, then stir in ten heaping teaspoonfuls pulverized sugar, well heaped, but not all you can take up on the spoon, and one of cornstarch; be sure that it is thoroughly beaten before taking the cake from the oven. Invert a milkpan, place the cake on the pan and apply frosting; it will be as smooth as glass, and adhere firmly to the cake.

CHOCOLATE FROSTING.

$\frac{3}{4}$ cup of grated chocolate, 3 cups of powdered sugar, the whites of four eggs. Beat the whites but very little, they must not become white, and stir in the chocolate, then pour in the sugar gradually, beating to mix it well.



YELLOW FROSTING.

The yolk of one egg to nine heaping teaspoonfuls of pulverized sugar ; flavor with vanilla. Use the same day it is made.

FROSTING WITHOUT EGGS.

Place one cup of sugar in a basin, add three tablespoonfuls of milk, put it on the stove and let it boil five minutes ; take off, and stir until perfectly white, adding any flavor. You can make a chocolate frosting of it by adding a square of Baker's chocolate, well shaved or melted, just as you take it from the stove.





How to Make all Kinds of Cookies.

ECONOMICAL COOKIES.

1 cup of sugar, $\frac{1}{2}$ cup of butter, 1 cup of water, 2 teaspoonfuls of baking powder, flavor with lemon. Flour enough to roll out thin, cut with a biscuit cutter.

NICE COOKIES.

2 eggs, 1 cup of sugar, $\frac{1}{2}$ cup of butter, 2 tablespoonfuls of sweet milk, 2 teaspoonfuls of baking powder, flour enough to stiffen. Mix soft and flavor with vanilla.

S

COOKIES

2 cups of sugar, 1 cup of butter, 2 eggs, $\frac{1}{2}$ cup of milk, 1 teaspoonful of cream tartar, $\frac{1}{2}$ teaspoonful of soda, flour to roll stiff.

MOLASSES COOKIES.

1 cup of butter, 2 cups of molasses, 1 teaspoonful cloves, 1 tablespoonful ginger. Sufficient flour to make a soft dough. Mould with the hands into small cakes, and bake in a steady rather than quick oven, as they are apt to burn.

SOFT GINGER COOKIES.

1 pint of molasses, 1 cup of lard, 1 cup of water, $1\frac{1}{2}$ teaspoonfuls of cream tartar, $\frac{1}{2}$ teaspoonful soda, 1 tablespoonful of ginger. Flour enough to roll as stiff as possible.

GINGER SNAPS.

Melt a quarter of a pound of butter, the same of lard, and mix them with : $\frac{1}{4}$ pound of brown sugar, 1 pint of molasses, 2 tablespoonfuls of ginger, 1 quart of flour. Dissolve two teaspoonfuls of saleratus in a wine-glass of milk, and strain it into the cake. Add sufficient flour to enable you to roll it out very thin, cut into cookies, and bake in a slow oven.

GINGER SNAPS.

1 cup of molasses, 1 cup of sugar, 1 cup of butter and lard mixed, 1 egg, $\frac{1}{2}$ cup of boiling water, 1 teaspoonful of soda dissolved in water, 2 teaspoonfuls of ginger. Flour enough to mould rather soft.

GINGER SNAPS.

2 cups of molasses, 1 cup of butter, melted into it, $\frac{1}{2}$ cup of water, 2 teaspoonfuls of soda, 3 teaspoonfuls of ginger, flour enough to roll soft. Bake with a hot fire. Watch carefully as they burn very easily.

**GINGERBREAD.***SOFT GINGER BREAD.*

2 well beaten eggs, 1 cupful of molasses, $\frac{1}{2}$ teacupful of lard, $\frac{1}{2}$ teacupful of butter, 1 tablespoonful of ginger, 1 teaspoonful of cream tartar, 1 teaspoonful of soda, dissolved in $\frac{1}{2}$ teacupful of milk, a pinch of salt, 3 cups of flour. Bake slowly for half an hour. Watch that it may not burn.

PLAIN GINGERBREAD.

2 cups molasses, $\frac{1}{2}$ cup lard, $\frac{1}{2}$ cup butter, 2 tablespoonfuls soda, dissolved in hot water, 2 tablespoonfuls ginger, 1 cup sour milk, thicken with flour to a stiff dough. Warm the molasses, lard, butter, and ginger and beat them well for about ten minutes before adding the milk, soda, and flour. Roll into shape and bake in a quick but not too hot oven. Brush over with white of egg while hot.



RISEN DOUGHNUTS.

1 pound butter, $1\frac{3}{4}$ pounds sugar, 1 quart sweet milk, 4 eggs, 1 large cup yeast, 1 tablespoonful mace or nutmeg, 2 teaspoonfuls cinnamon, flour to make stiff as bread dough, 1 teaspoonful salt. Beat the sugar and butter to a cream, add the milk, yeast, and a quart of flour. Set to rise over night. In the morning add the eggs, well beaten, spice, and the rest of the flour. Let rise until light; roll into thick sheets, cut into shape and fry in hot lard.

DOUGHNUTS.

1 cup sour cream, 1 cup sugar, 1 egg, a small teaspoonful of soda, $\frac{1}{2}$ teaspoonful of salt, flavor to taste. Mix soft, roll, three-quarters of an inch thick, cut out with a round cookie cutter with a hole in the center. Fry in hot lard.

FRITTERS.

2 tablespoonfuls of sugar, 3 eggs, 2 cups of sour milk, 1 teaspoonful of soda, $\frac{1}{2}$ teaspoonful of salt. Flour enough to make a thick batter. Beat well, fry in hot lard until a light brown. Roll in powdered sugar when done.

CRULLERS.

2 cups sugar, 1 cup butter, 2 eggs, 2 cups sour milk, 1 teaspoonful soda dissolved in hot water, Flour to roll out tolerably stiff.

GRAHAM MUFFINS.

3 cups graham flour, 1 cup white flour, 1 quart of milk, $\frac{3}{4}$ cup of yeast, 1 tablespoonful lard or butter, 1 teaspoonful salt, 2 tablespoonfuls sugar. Set to rise over night, bake in muffin rings twenty minutes in a quick oven. Eat hot.

MUFFINS.

1 pint milk, 1 egg, a tablespoonful lard, $\frac{1}{2}$ cup yeast, Flour for a stiff batter, 1 teaspoonful salt. Set to rise over night. Bake in muffin-rings.

STEAMED CORN BREAD.

2 cups Indian meal, 1 cup flour, 2 tablespoonfuls white sugar, $2\frac{1}{2}$ cups buttermilk, 1 teaspoonful soda, 1 teaspoonful salt, 1 heaping teaspoonful melted lard. Beat well and put into a buttered mould. Place in a steamer over a pot of boiling water. Steam $1\frac{1}{2}$ hours, and set in oven about 10 minutes. Eat while warm.

JOHNNY CAKE.

1 teacupful sweet milk, 1 teacupful buttermilk, 1 teaspoonful salt, 1 teaspoonful soda, 1 tablespoonful melted butter. Enough meal to enable you to roll it. Spread in a shallow buttered pan and bake forty minutes. As soon as it begins to brown, baste it with a rag tied to a stick and dipped in melted butter. Repeat five or six times until it is brown and crisp.

WAFFLES.

2 cups milk, 2 eggs, 3 cups flour, 1 teaspoonful cream-tartar, $\frac{1}{2}$ teaspoonful soda, 1 saltspoonful salt, 1 tablespoonful melted butter. Sift the cream tartar with the salt into the flour, add soda dissolved in a little hot water, milk and eggs. Add the flour the last thing. If the batter is too stiff, put in more milk.

RICE WAFFLES.

1 cup boiled rice, 1 pint milk, 2 eggs, Lard the size of a walnut, $\frac{1}{2}$ teaspoonful soda, 1 teaspoonful cream-tartar, 1 teaspoonful salt, Flour for a thin batter.

GRAHAM GEMS.

Thicken with graham flour, 2 cups of sour milk, 1 large teaspoonful of soda, 2 tablespoonfuls of molasses. Bake in gem pans.

RICE GRIDDLE CAKES.

Mix together : $\frac{1}{2}$ cup of flour, 1 cup of boiled rice, 1 teaspoonful of soda, 2 teaspoonfuls of cream-tartar, 1 egg. Sweet milk enough to make a batter of the right consistency.

BREAKFAST CAKES.

Beat well together : 1 egg, $\frac{1}{2}$ pint of sweet milk, 1 cup of flour, 1 pinch of salt. Heat gem irons very hot, well greased, and bake them in a hot oven.



How to Make all Kinds of Puddings.

CHOCOLATE PUDDING.

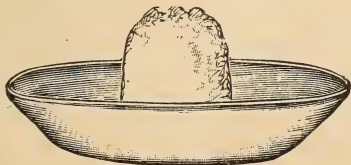
For one quart of sweet milk take a teacupful bread crumbs, two-thirds cupful of grated chocolate, the yolks of 4 eggs and one teacupful sugar. Heat milk and crumbs to moderate warmth and stir into them the sugar, chocolate and yolks, well beaten together with a tablespoonful of corn starch previously moistened with a little milk or water. Stir until scalding hot, then pour into a dish and cover the top with the egg whites beaten stiff and sweetened. Bake brown. Serve cold.

"BROWN PETTY."

A very simple but palatable dessert is made thus: Cut stale bread in very small squares or slices, and place a teacupful in the bottom of an earthen pudding dish. Over this put a thick layer of sliced sour apples; sprinkle them thickly with sugar and cinnamon and a few bits of butter; then more crumbs, apples, etc., until the dish is full. Finish with the crumbs, and then pour over half a pint boiling water, cover closely and bake in a moderate oven. When the apples begin to soften, remove the cover and bake to a delicate brown. To be eaten cold with cream or milk, preferably the former.

SUET PUDDING.

One cup of sugar, one cup of suet, chopped fine, one cup of raisins or English currants, chopped fine, one-half cup of sweet milk, two eggs, one teaspoonful of soda. Stir with flour like cake. Steam three hours.



THE QUEEN OF PUDDINGS.

1½ cup white sugar, 2 cups fine dry bread-crumbs, 5 eggs, 1 tablespoonful of butter, vanilla or lemon seasoning, 1 quart fresh milk and one-half cup jelly. Rub the butter into a cup of sugar; beat the yolks very light, and stir these together to a cream. Add the bread-crumbs soaked in milk and the seasoning. Bake in a large buttered pudding dish, filling it about two-thirds full, until the custard is "set". Draw to the mouth of the oven, spread over the jelly or other nice fruit conserve. Cover this with a meringue made of the whipped whites and a half cup of sugar. Shut the oven and bake until the meringue begins to color. Eat cold with cream. You may, in the fruit season, substitute the fresh fruit for preserves.

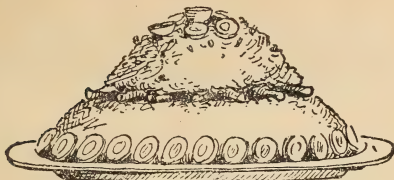
SNOW PUDDING.



Dissolve in one pint of hot water one-half ounce of gelatine. After it has cooled add the beaten whites of three eggs, one teacupful of sugar, and the juice of two lemons. Pour the whole into a mould. When set put into a dish, pour over it a quart of custard, flavored with vanilla, and set on the ice until served.

BREAD PUDDING.

2 cups of grated bread crumbs, 3 eggs, sugar to taste, season with nutmeg or cinnamon, milk to make very thin. Bake about thirty minutes. The white of one of the eggs may be saved and beaten to a stiff froth to which add a tablespoonful of powdered sugar. This may be spread on the top of the pudding when it is done. Place it back into the oven a moment to brown.



GREEN CORN PUDDING.

With a sharp knife, cut lengthwise through the kernels of six large ears of corn ; then slice off the slit kernels and with back of knife scrape the rest from the ear. Mix thoroughly with this pulp 2 well-beaten eggs, 2 tablespoonfuls each of sugar and butter, $\frac{1}{2}$ teaspoonful salt, six rolled crackers and one teacupful milk. Bake three hours in a greased pudding dish. Eat with a hot sauce.

PIE-PLANT PUDDING.

Peel the stalks and cut them in small pieces ; allow same weight of sugar as of pie-plant. Cover the bottom of an earthen pudding dish with the cut plant and sugar, then spread on a layer of bread crumbs and bits of butter ; next more pie-plant, and so on alternately until the dish is full, finishing with bread crumbs. Cover and bake in a moderate oven until the pie-plant is cooked ; then remove and brown the top. When ready for the table, a boiled custard may be poured over it, though the dish is good without.

TAYLOR PUDDING.

One cup of milk, one cup of molasses, one cup of suet, chopped fine, two cups of raisins stoned and chopped, three cups of sifted flour, with three teaspoonfuls of baking-powder, one teaspoonful of salt, and one teaspoonful each of allspice, cinnamon and nutmeg. Boil in a mould four hours, and eat with a liquid sauce.

BOSTON PUDDING.

One cup of chopped suet, one cup of sweet milk, two cups of raisins, one cup of molasses, three cups of sifted flour, one teaspoonful of soda, two teaspoonfuls of salt. For extra occasions I add one cup of currants and half a cup of sliced citron. Season with cloves and cinnamon to taste. Boil three hours. Eat with hard sauce.

HOME PUDDING.

2 eggs, 1 cup of sugar, $\frac{1}{2}$ cup of milk, $1\frac{1}{2}$ cups of flour, 2 teaspoonfuls of baking powder, 1 tablespoonful of melted butter. Bake twenty or thirty minutes. Serve with cream and sugar or with lemon sauce.

RAISIN PUDDING.

Pour two cups of boiling milk over one teacupful of bread crumbs, add three tablespoonfuls of butter. Let stand until perfectly cool; then add: 1 cupful seeded raisins, 1 cup of sugar, 1 cup of cream, the yolks of $\frac{1}{2}$ dozen eggs, lastly the well whipped whites. To be served with sauce.

APPLE PUDDING.

Cover the bottom of a buttered pudding dish with a thin layer of grated bread crumbs, drop over them small bits of butter quite thickly; then a layer of grated apples, a thick layer of sugar, sprinkle with cinnamon; another layer of bread crumbs, and so on until the dish is filled. Pour over all a half cup of milk. Serve with cream and sugar.

CHOCOLATE PUDDING.

Sweeten one quart of sweet milk with one cup of white sugar and let come to a boil; when it boils pour into it four tablespoonfuls of corn starch dissolved in one well beaten egg and a little milk; add one cup of boiling milk and two cups of grated chocolate. When it is done pour into a mold. Serve with cream and sugar when cold.

FROZEN PUDDING.

Make a plain egg and milk custard, three pints, add a cupful of partially chopped, blanched almonds and pour into the freezer. When just beginning to freeze add two cups of whipped cream. Stir often while freezing so that the fruit will be well distributed.

CORN-STARCH PUDDING.

4 tablespoonfuls corn-starch, 1 quart milk, 4 eggs (whites and yolks separate), $\frac{3}{4}$ cup sugar, nutmeg and cinnamon, 1 tablespoonful butter. Let the milk come to a boil, stir in the corn-starch dissolved in a little cold milk. Let boil three minutes, stirring all the time. Remove from the fire and add the butter. Set away until cold; beat the eggs very light—the sugar and seasoning with them, stir into the corn-starch, beating thoroughly to a smooth custard. Turn into a buttered dish and bake half an hour. Eat cold, with powdered sugar sifted over it.



BREAD PUDDING.

1 quart of milk, 2 cups of fine bread crumbs (dry and stale), 4 eggs, 2 tablespoonfuls melted butter, nutmeg to taste, $\frac{1}{4}$ teaspoonful soda dissolved in hot water. Beat the yolks very light and mix with the bread crumbs which have previously been well soaked in the milk. Stir these together; then add the butter, seasoning, soda and the whites in the order named. Bake to a fine brown, and eat hot with sweetened cream or with pudding sauce.

APPLE TAPIOCA PUDDING.

Soak one cup of tapioca in three pints of water (cold) over night. In the morning let boil twenty or thirty minutes, or until it looks clear. Add $1\frac{1}{2}$ quarts of pared and quartered apples, 1 cupful of sugar, 1 teaspoonful of salt. Flavor with lemon. Bake $1\frac{1}{4}$ hours in a buttered dish. Serve when cold, with sugar and cream.

RICE PUDDING.

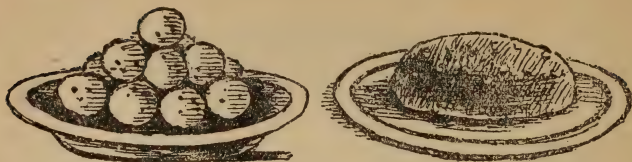
1 coffee-cup rice, 2 quarts milk, 8 tablespoonfuls sugar, 1 teaspoonful salt, butter the size of an egg (melted), nutmeg or cinnamon to taste. Soak the rice in one pint of the milk two hours, then add the rest of the milk, the sugar, salt, butter and spice. Bake two hours. Eat cold.

A SPLENDID PUDDING.

Bake a common sponge cake in a flat buttered pudding dish, or take stale cake on hand, cut in six or eight pieces. Split and spread with butter and return them to the dish. Make a custard with four eggs to a quart of milk, flavor and sweeten to taste. Pour over the cake and bake about thirty minutes. The cake will swell up and fill the custard.

APPLE PUDDING.

Remove the core of as many apples as you wish and cut them just in half, place them in a pudding dish, the round side down. Fill the hollow places with a little butter, sugar and cinnamon. Pour a milk and egg custard over all, and bake for twenty-five or thirty minutes. Serve with cream and sugar.



SAUCE.

Two tablespoonfuls of flour, seven tablespoonfuls of sugar, two tablespoonfuls of butter, a little nutmeg. Stir all together and pour on boiling water and let it boil on the stove. When ready to serve, add to the sauce one large teaspoonful of your favorite jelly.

OLD ENGLISH PLUM PUDDING.

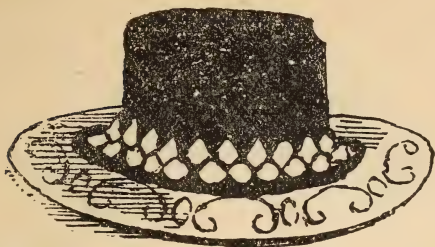
Take one-half cup of lard and one-half cup of butter, two cups of English currants. Mix all these (currants and shortening) dry through some flour, add water to make a dough as stiff as pie crust; take one-third of this mixed dough and roll out in a large, round sheet. On it put a cup and a half of sugar and two-thirds of a cup of butter and a cup of currants. Draw the crust around this like a dumpling; roll out the rest of the dough and wrap it around the dumpling; tie this up securely in a cloth, to boil three hours. To be eaten with sauce or simply with moistened sugar.

CHRISTMAS PLUM PUDDING.

One coffeecup of raisins, stoned and cut up, one cup of molasses, one cup of sweet milk, one cup of chopped suet (or if you have it, a half cup of butter), three cups of flour, one teaspoonful of saleratus, one teaspoonful each of salt, cinnamon, cloves and nutmeg. Steam three hours. To be eaten with a rich sauce.

DELMONICO PUDDING.

Heat a quart of milk to boiling and stir into it 3 tablespoonfuls corn starch previously moistened; let it boil a few minutes, then add the yolks of 5 eggs beaten with 6 tablespoonfuls sugar and half a teaspoonful extract of vanilla. Place the whole in a pudding dish and bake. Beat the whites stiff, add 2 or 3 tablespoonfuls sugar and a few drops extract of lemon; spread this over the pudding as soon as done, or lay it on in spoonfuls; return to oven and bake to a nice yellow.



STEAMED INDIAN PUDDING.

One pint each of sour milk and of Indian meal, 1 teacupful rye flour (or in absence of rye flour use white flour), $\frac{1}{3}$ teacupful molasses, one teaspoonful salt and a large one of soda. Dissolve the soda in a little warm water and stir it in after the other ingredients are well mixed. Lastly add half a teacupful raisins. Steam in a mold 3 or 4 hours. For a sauce take a teacupful molasses, half as much water, 1 tablespoonful butter, a pinch of salt, 3 tablespoonfuls vinegar. Boil together 15 or 20 minutes.

A GLACE CHERRY PUDDING.

One-half cup of butter, one cup of sugar, one-half cup of milk, one and one-half cups of flour, one teaspoonful of baking powder, one teaspoonful of vanilla flavoring. Bake in the round lids of baking powder tins. While these are baking, boil two tablespoonfuls of sugar, three-fourths of a cup of milk, one large tablespoonful of corn starch and the beaten white of one egg. Flavor with one-half teaspoonful of vanilla extract. When the puddings are baked, and while this mixture is still hot, spread one large teaspoonful smoothly over the top of each pudding.

Have white glacé cherries cut into halves. Place about six of these pieces around the top of each pudding. For the sauce, boil three-fourths of a cup of sugar, one and one-half cups of milk, two tablespoonfuls of butter, one tablespoonful of corn starch, the yolks of three eggs, and one teaspoonful of vanilla extract. Pour the sauce around each little pudding. Serve hot. These quantities are sufficient for twelve persons.



BREAD AND BUTTER PUDDING.

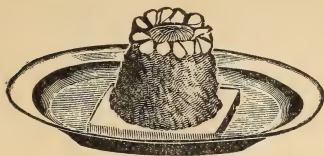
Cut bread in rather thin slices, remove crusts, lay the buttered slices in a pudding dish and sprinkle currants liberally over the bread layers. When the dish is nearly full, pour a boiled custard over it ; bake 15 to 20 minutes. Serve with sauce.

BLACKBERRY SPONGE.

Cover half a box of gelatine with a cupful of cold water and soak for half an hour, pour over a pint of boiling water, add half a cupful of sugar and stir until dissolved ; strain in a pint of blackberry juice, mix, and pour in a tin pan. Set on ice until thick, then beat to a froth, add the beaten whites of four eggs and mix smooth. Pour in a mold and set on ice to harden. Serve with vanilla sauce.

CHERRY AND TAPIOCA PUDDING.

Soak one teacupful tapioca over night in its bulk of cold water ; in the morning put it on the fire adding 2 teacupfuls of hot water and bring to a boil ; add 1½ pounds stoned cherries, and sugar enough to sweeten. When the cherries are cooked through take up in a mold and set in a cool plate to stiffen. Serve with sugar and whipped cream.



QUICK PUDDING.

Set a quart of milk to cook on the stove, and when it boils stir in flour smoothly until it becomes quite thick. Salt and sugar to taste. An egg may be added if desired. Serve hot with a sauce made as follows: Beat a tablespoonful of sugar and a piece of butter about the size of a walnut to a cream. Then pour on a pint of milk and let boil ten minutes.

COCOANUT PUDDING.

1 pint of milk, yolks of two eggs (well beaten), two tablespoonfuls cocoanut, $\frac{1}{2}$ teacup of rolled cracker crumbs, Sweeten and flavor to taste. Bake thirty minutes. Make a frosting of the whites of the eggs, beaten to a froth, and a cup of sugar. Spread over the top.

TAPIOCA PUDDING.

Soak one-half cupful of tapioca in luke-warm water over night. In the morning put into it 1 quart of sweet milk, 4 eggs, whites and yolks well beaten and added separately, $\frac{1}{2}$ cup of sugar, $\frac{1}{2}$ teaspoonful of salt. Boil until it creams, stirring constantly with a wooden spoon. Jelly laid on in spoonfuls may be added, or it may be eaten with cream and sugar.

How to Make all Kinds of Pudding Sauces.

LEMON SAUCE.

Beat together, until light : The yolks of two eggs, 1 cup of sugar, $\frac{1}{2}$ cup of butter, 1 tablespoonful of corn starch, the juice of one lemon. Stir this into one cup and a half of boiling water, until sufficiently thick for the table.

VANILLA SAUCE.

Beat the whites of two eggs to a stiff froth, and then beat in $\frac{1}{2}$ cup of powdered sugar, the yolk of one egg, 1 teaspoonful of vinilla.

APRICOT SAUCE.

1 cupful of canned apricots, 1 cupful of sugar, 1 cupful of milk, 1 tablespoonful of corn starch, $\frac{1}{2}$ cupful of water. Put the mik on to boil. Mix the corn starch with a little cold milk, and stir into the boiling milk. Cook ten minutes. Boil the sugar and water together for twenty minutes. Rub the apricots into a sieve, and stir it into the syrup. Beat well, and then beat it into the boiled milk and corn starch. Place the sauce pan in cold water and stir eight minutes, and set away to cool.

CREAM SAUCE.

1 cupful of powdered sugar, 1 egg, 2 cupfuls of whipped cream. Beat the white of the egg to a stiff froth. Add the yolk and sugar and beat well. Flavor with vanilla, or lemon, and add the cream last of all.

COLD CREAM SAUCE.

1 cup of sugar, 1 cup of butter well beaten, 1 cup of good cream. Stir all well together, and place it where it will keep cool.

PUDDING SAUCE.

One spoonful of flour wet with a cup of milk, one half cup of sugar, one half spoonful of butter. Boil slowly and flavor with extracts to taste.

PUDDING SAUCE.

1 pint water made into a smooth starch with a heaping tablespoon flour. Cook ten minutes, strain if necessary, sweeten to taste and pour it on 1 tablespoon butter and juice of a lemon or other flavoring. If lemon is not used add 1 tablespoon vinegar.

This can be made richer by using more butter and sugar ; stir them in a cream with a flavoring, then add the starch.



Pies and Tarts.

PASTRY.

The water used in making pastry should always be cold and in summer ice water is best. The cook must be dexterous as well as skilled, for so much depends upon the handling, that although pastry be made ever so well, unless it gets into the oven quickly, it will lose its elasticity and become heavy. Fruit and filling should always be cold when put into the crust.

PIE CRUST.

Three teacupfuls of flour, half the quantity of butter, and half a teacup of lard ; work the lard and butter into the flour and pour in a teacupful of cold water ; knead into a firm dough with the least possible handling ; roll out a thin sheet and place all over it pieces of butter set closely together ; fold up and roll out again as before, repeating the process until the butter has been thoroughly assimilated with the dough, using a slight sprinkling of flour when needed.

APPLE CUSTARD PIE.

Make a very smooth apple sauce ; to each cupful add two eggs beaten light, and half a cup of fresh milk. Line a pie-plate with paste and fill with the custard. Bake without upper crust.

DATE PIE.

Soak one pound of dates over night and stew until they can be strained ; mix with a quart of milk, three eggs, and add a little salt and nutmeg. Bake with an under-crust only. This will make three pies.

LEMON PIE.

Two tablespoonfuls of flour, two-thirds of a cupful of water, one teacupful of sugar, yolks of three eggs, the grated rind and the juice of one lemon. Bake in a hot oven. Mix the whites of the eggs, well beaten, with three teaspoonfuls of sugar. Spread over the top of the pie when done, and return it to the oven until nicely browned.

COCOANUT PIE.

To a pint of scalded milk add half a teacupful of sugar, the yolks of two eggs and a dessertspoonful of corn starch dissolved in milk; beat all together; cook in the boiling milk and add a teacupful of grated cocoanut which has been soaked in milk over night; bake with the lower crust only. Beat the whites of the eggs to a froth, mix with two teaspoonfuls of sugar and spread over the pie when baked, return to the oven until nicely browned.

CREAM PIE.

A scant half cup of corn starch, thoroughly mixed with one cup of sweet cream and half a cup of sugar. Flavor with lemon. Bake with one crust.

PUMPKIN PIE.

Stew the pumpkin until soft. Strain through a sieve and for every pint take two eggs, one and one-half cups of sugar, one and one-half pint of milk, one-half teaspoonful of ginger, and two teaspoonfuls of cinnamon. Beat well and bake without upper crust.

MINCE PIE.

One pound each of raisins, currents and sugar; stone and chop the raisins; one pound of suet chopped very fine, two-thirds of an ounce each of candied lemon and orange peel, two large apples, chopped fine, one-third of an ounce cinnamon, two-thirds of a nutmeg, the juice of one lemon and two-thirds of a gill of cider. Bake with two crusts.

**COMPOTE OF APPLES.****TARTS.**

Roll the paste very thin, line small patty pans, and bake. When done and cold, fill with any kind of preserves, jelly or marmalade.

CHOCOLATE TARTLETS.

Four eggs, one-half cake of chocolate, grated; one tablespoonful corn starch, dissolved in milk; three tablespoonfuls of milk; four tablespoonfuls of sugar; a heaping teaspoonful of butter, a pinch of salt, flavor to suit. Rub the chocolate smooth in the milk, heat over the fire and add the cornstarch, wet with more milk. Stir until thickened, then pour out. When cold beat in the yolks of the eggs, sugar and flavoring. Bake in small patty pans lined with paste. Cover with the whites beaten to a froth to which a little sugar has been added,



CORN OMELET.

How to Make all Kinds of Omelets.

CORN OMELET.

For this take young tender sweet corn ; shave off the kernels, scrape ont the rest with a dull knife, being careful not to get in any of the cob. For 4 large ears, add 3 well-beaten eggs, 2 tablespoonfuls cream, or the same amount of milk with a tablespoonful butter, a pinch of salt and a little pepper. Place a tablespoonful butter in a spider, and when hot pour in the omelet. As soon as it sets, turn or fold it over and take up on a hot platter. Omelet is best if eaten hot.

VEGETABLE OMELET.

Cold cooked asparagus, French beans, carrots, cabbage, cauliflower sprigs, spinach, sorrel, tomatoes, mushrooms, etc., are all suitable to introduce into an omelet. Chop very finely the vegetable or vegetables in question—for a mixture is often preferred to only one kind—then mix thoroughly with the eggs ; be careful to add appropriate seasonings, and proceed as already directed, serving with sauce, or not, just according to taste and convenience. Always continue the beating for some time after the last addition has been made to insure the ingredients being thoroughly blended, as this the most important point.

FISH OMELET.

The remains of almost any kind of fresh fish may, with great advantage, be used for this purpose, and only a very small quantity is required—about two large teaspoonfuls for four eggs. After carefully removing the bones and every particle of skin, mince the fish very finely, or tear it

in tiny shreds with two forks, and add to it the other ingredients, then fry, and serve in the usual manner ; or, if preferred, dish up without a paper under, and pour a few tablespoonfuls of some rich, boiling-hot fish sauce round—but not over—the omelet just at the last minute.

OMELETS WITH MEAT.



OMELET.

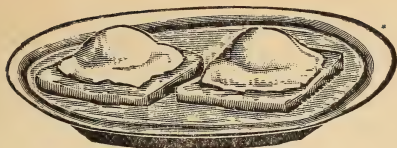
It is almost impossible to get wrong in the making of these, as the remains of all sorts of meat, poultry, and game may be used, providing they are carefully prepared, very finely minced, and pleasantly seasoned previously to being added to the eggs. Cook in the usual way, serve as fancy dictates.

CHEESE OMELETS.

These form a particular appetizing little dish, and are deservedly very popular. To four eggs allow to dessertspoonfuls of grated cheese, a teaspoonful of finely minced parsley, and a seasoning of salt and pepper ; then, when sufficiently beaten, fry, and serve in the ordinary way.

SWEET OMELETS.

These are prepared, cooked, and served in precisely the same manner as described above, only substituting sweet ingredients for the savory. A tablespoonful of fine white sugar, a pinch of salt, and a few drops of some favorite flavoring essence added to the eggs will make a most delicious plain omelet ; but, if prepared, about two tablespoonfuls of some delicate preserve may be used, or any kind of fresh fruit which has been partially cooked and sweetened, the omelet, of course, taking its name accordingly.



New Egg Dishes.

EGG ON TOAST.

Put one quart of boiling water and one tablespoonful of salt in a frying-pan. Break the eggs, one by one, into a saucer and slide carefully into the salted water. Cook until the white is firm. Lift out carefully and place on toasted slices of bread. Serve immediately.

SALAD EGGS.

Boil the eggs hard, turning them several times to prevent the yolks from settling on one side. When cool peel off the shells, cut across neatly with a sharp knife, remove the yolks and mash them smooth, mix with them some good salad dressing, taking care not to make the mixture too thin.

Return this mixture into the white part, and place the two halves together neatly so as to look as if it had never been cut. Lay each egg in a fresh lettuce leaf.

Excellent for picnics and luncheons.

CREAMED EGGS.

Boil six eggs twenty minutes. Make one pint of cream sauce. Have six slices of toast on a hot dish. Put a layer of sauce on each one, and then part of the white of the eggs, cut in thin strips; and rub part of the yolks through a sieve onto the toast. Repeat this, and finish with a third layer of sauce. Place in the oven for about three minutes. Garnish with parsley, and serve.

STUFFED EGGS.

Cut six hard-boiled eggs in two. Take out the yolks and mash them fine. Add two teaspoonfuls of butter, one of cream, two or three drops of onion juice, and salt and pepper to taste. Mix all thoroughly. Fill the eggs from the mixture, and put them together. There will be a little filling left, to which add a well-beaten egg. Cover the other eggs with this last preparation, and roll in cracked crumbs. Fry in *boiling* lard till a light brown.

New Dishes of Rice.*RICE.*

Rice is the most digestible of all vegetable foods, and on that account is valuable alike for the table, nursery and sick-room. It is very rich in starch, but not as nutritive as wheat and some other cereals. It may be prepared in a variety of ways.

TO MAKE A RICE BORDER.

Wash one cupful of rice in cold water, and drain it; put in a saucepan and pour over one quart of boiling stock, let boil rapidly for 15 minutes; then stand on the back of the stove for 15 minutes longer; drain, season with salt and pepper and press into a well-buttered mold. Put in the oven and bake 15 minutes. Take up, turn out on a dish, fill the center with stewed chicken.

RICE CROQUETTES.

Wash a cupful of rice, put in a saucepan with a quart of milk and boil until thick; add the yolks of four eggs and cook ten minutes longer. Take from the fire, add a tablespoonful of chopped parsley, a little salt and pepper; mix well, turn out on a plate and set aside until very cold. Form in croquettes, dip first in beaten egg, then in grated bread crumbs and fry in boiling lard.

RICE SOUFFLE.

Put half a pint of cream on to boil. Beat two ounces of butter, five ounces of sugar, three ounces of ground rice and the yolks of six eggs together until light, stir into boiling cream, and stir until thick. Take from the fire, add a teaspoonful of vanilla and half a teaspoonful of salt. Beat the whites of six eggs, stir them carefully into the mixture and turn in a glass bowl.

SNOWBALLS.

Wash a cupful of rice and put in a saucepan with a cupful of milk; boil until tender, add a pinch of salt and put in small cups to cool. When cold, turn out in a dish and pour over boiled custard. Serve with whipped cream or sauce.

RICE MERINGUE.

Boil a cupful of rice in a quart of water until tender, drain in a colander; add a pint of milk, a tablespoonful of butter and the yolks of six eggs beaten with two cupfuls of sugar, with the juice and rind of a lemon, pour in a baking-dish and bake in a quick oven. Beat the whites of the eggs with a tea-cupful of powdered sugar and heap over the top; set in the oven to brown.



EARS OF RICE.



APPEL KUCHEN.



NUDELN.

How to Make Frozen or Other Desserts.

FOR FREEZING ICE CREAM.

Have ice pounded in small pieces (pound in a bag), pack around the tin can a layer of ice about five inches deep, then a thin layer of salt, and so on until the tub is full, packing down well. For a gallon can use three pints of rock salt and about ten quarts of ice. If packed solid no more ice or salt is needed. Do not drain off the water while freezing. If more salt is used the cream freezes sooner, but will not be so rich and smooth.

BOILED ICE CREAM.

Take two quarts of sweet milk and one pint of sweet cream and let come to a boil. Take four tablespoonfuls corn starch and dissolve in a little milk, five eggs, well beaten, one and one-half cups of sugar, beat thoroughly. Pour into the boiling milk and cream, stirring well and let come to a boil once more. Set away to cool, when thoroughly cold, freeze.

Any flavoring to suit the taste may be added, before cooling.

STRAWBERRY ICE CREAM.

Mash two pints of strawberries, and one pint of sugar together, and let them stand one and one-half or two hours. Then rub through a strainer into one quart of cream and freeze.

ICE CREAM.

Take one quart of milk, and one quart of cream, sweeten and flavor to taste. Let stand in the freezer fifteen minutes before commencing to freeze.



LEMON WATER ICE.

Take two lemons and rasp them on sugar, the juice of six lemons, the juice of one orange, one pint of clarified sugar and half a pint of water. Mix all together, strain through a fine sieve and freeze.

CURRENT ICE.

Take two pounds of ripe, red currants and half a pound of raspberries, rub through a fine sieve into an earthen dish, add about one pint of thick sugar syrup. Put into a freezer and freeze in the ordinary way.

ALMOND CREAM.

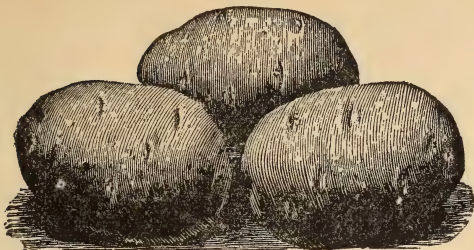


Blanch and pound fine, with a little water, one and a half pounds of almonds: beat the whites of two eggs to a froth, beat into this five ounces of powd.

ered sugar, and to both add one quart of milk. Boil gently over a slow fire until reduced one-quarter, then add the almond paste and boil five minutes longer. Flavor to taste, and when cold sprinkle thickly with granulated sugar and brown, garnish with whole almonds.

SNOW PYRAMIDS.

Beat the whites of half a dozen eggs to a stiff froth; add a teacupful of currant jelly, and whip all together; fill saucers half full of cream, dropping into the centre of each a tablespoonful of the egg and jelly in the shape of a pyramid.



New Ways for Cooking Potatoes

POTATO CAKES WITH PREPARED FLOUR.

Mix together one pint each of milk, mashed potato, and prepared flour, four eggs beaten light, an even teaspoonful of salt, and bake the cakes like biscuit.

POTATO PUFFS.

Melt two heaping tablespoons of butter in half a cupful of cream, stir it into a pint of hot, mashed potato with an even teaspoonful each of salt and white pepper, two eggs beaten to a foam and enough prepared flour to make a dough, which can be rolled out and cut in thin biscuits ; bake them in a rather moderate oven, so they cannot burn, and serve them hot with butter.

RAW POTATO FRITTERS.

Peel and grate under water a pint of raw potatoes, drain off the water through a towel and wring the potato pulp in it ; mix the liquid with three heaping tablespoons of flour and three eggs beaten light, salt and pepper to taste, and fry the batter at once in enough smoking-hot fat to float the fritters ; serve them hot, dusted with powdered sugar.

POTATO CUSTARD PIE.

To a pint of mashed potato and two eggs beaten light, add half a cupful of warm milk containing half a cupful of sugar and a heaping teaspoonful of butter. flavor the custard with grated nutmeg, and bake it in a bottom crust, to be eaten either hot or cold, like other custard pie.

DELICIOUS DISHES OF SWEET POTATOES.*SCALLOPED SWEET POTATOES.*

Take large sweet potatoes, boil, peel and slice. Put a layer in the bottom of a deep pan, put over a layer of butter and sugar, then more potatoes, butter and sugar until the pan is full. Set in the oven to brown. Sift sugar and grated nutmeg over the top.

SWEET POTATOES A LA PROVINCE.

Slice raw sweet potatoes thin and lay in a dish with bits of butter ; sprinkle with salt and pepper, pour over milk to cover. Wet bread crumbs in cream, add a beaten egg, pour over the top. Set in the oven and bake until done.

SWEET POTATO CUSTARD.

Take a quart of sweet milk, beat the yolks of four eggs with a teacupful of sugar, put in a saucepan and set on the stove, let come to a boil ; mash a teacupful of boiled sweet potatoes and mix in ; take off the fire and stir until cool ; flavor with nutmeg. When ready to serve, put in glasses and pile meringue over the tops.

SWEET POTATO PIE.

Boil large sweet potatoes, peel and slice ; place evenly on the bottom of a deep pie-pan lined with crust, cover with butter and sugar, then another layer of sweet potatoes, butter and sugar until full. Bake in a slow oven.

SWEET POTATO CUSTARD PIE.

Take one pint of mashed sweet potatoes and a teacupful of sweet milk. Beat the yolks of four eggs, and cream a teacupful of sugar and butter together : mix with the potatoes. Flavor with nutmeg. Beat the whites to a stiff froth and stir in. Pour in pie-pans lined with crust and bake quickly.

SWEET POTATO PUDDING.

Take two pounds of boiled sweet potatoes, mash and mix them with half a pound of butter, six eggs, a teacupful of milk and one grated lemon, Put in a pudding-dish, bake, and serve with wine sauce.

A FEW NOVEL VEGETABLE DISHES.

General Directions.

Great care should be used in picking out all the defective or rotten portions of vegetables before cooking. It is better to soak vegetables an hour or two before cooking.

The water should always boil before putting in the vegetables.

Hold onions under water while peeling as it will prevent the odor from affecting the eyes.

BAKED BEETS.

Beets are nearly always boiled, but if baked right, they are excellent. Wash them well, and place in a dripping pan to roast, as you would meat, with a little water, replenishing it as it cooks away. Bake slowly in a moderate oven for three hours, and when soft, peel them, and season to taste, with quite a little butter, pepper and salt.



STEWED CELERY.

Use only the tender stalks, which should be cut into small pieces and stewed in beef broth. When cooked tender, dress with ; $\frac{1}{2}$ pint of cream, 1 teaspoonful of butter, 1 teaspoonful of flour, pepper and salt to taste.

SCALLOPED VEGETABLE OYSTERS.

Cut the scraped roots into small pieces and boil until tender. Place in a deep dish a layer of rolled crackers or bread crumbs, and layers of oysters, consecutively, seasoning each layer with pepper, salt, butter and parsley or celery leaves. When the dish is full, pour over it two pints of sweet milk, and bake an hour and a half or two hours in a medium oven.

SMOTHERED CABBAGE.

Cut a small head of cabbage fine, and put into a pan where meat has been fried ; put on a very little sweet milk, season with pepper and salt, and butter about the size of an egg. Cover it tightly and let it stand on the back of the stove fifteen or twenty minutes.



NEW WAYS FOR COOKING CORN.

BAKED CORN.

1 quart corn, cut from cob.

$\frac{2}{3}$ cup of cream.

1 tablespoonful of butter.

Season with pepper and salt to taste. Bake one hour. Stir it several times while baking.

FRIED CORN.

Put into a skillet containing hot butter, corn that has been cut from the cob. Season with pepper and salt, and stir it often, to prevent it burning. It should be kept covered.

CORN OYSTERS.

Grate the corn into a dish, and season with salt and pepper. Drop a spoonful into a well buttered skillet, in form of oysters, and as soon as they are brown, turn them over to brown, the same on the other side. Serve hot.

HULLED CORN.

To every pint of corn, add a half tablespoonful of baking soda, and enough water to cover it. Let it soak over night and in the morning boil in this solution, until the hulls will rub off, which will require about two hours.

CORN CUSTARD.

After cutting the corn from the cob, mix it medium thick with milk, pepper and salt to taste. Then add three well beaten eggs, and bake twenty-five or thirty minutes.

CORN CAKES.

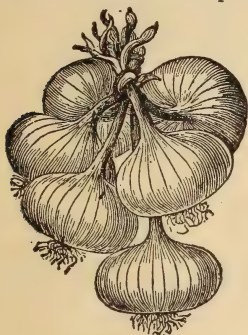
Mix well: 1 pint of grated corn; 1 teaspoonful of melted butter; 3 tablespoonfuls of sweet milk; 2 eggs, well beaten; 3 tablespoonfuls of rolled crackers. Fry in hot butter.

CORN FRITTERS.

Score and press out the pulp of one dozen ears of sugar corn, add to this one cupful of sifted flour, one cupful of milk, half a teaspoonful of salt, one teaspoonful of sugar, a pinch of black pepper and the beaten yolks of two eggs. Beat well, stir in carefully the two whites beaten to a stiff froth, and one teaspoonful of baking powder. Fry them like any other fritter, in smoking hot fat, and drain them on brown paper.

HOW TO MAKE SAUER KRAUT.

Take off the outer leaves of the cabbage and the core, and cut it very fine on a slaw cutter ; put it down in a keg or large jar, and sprinkle a little salt between each layer, and pound each with a masher or mallet. When the receptacle is full place some large cabbage leaves on top, and a thick cloth, first wrung out of cold water ; then cover it and put on a very heavy weight. It should stand for six weeks before using, and it should have every bit of scum removed by washing the cloth and weight. Before it is used, the water should be drained off and fresh put on.



ROASTED ONIONS.

Onions are very good roasted in ashes, without removing the skin. When they are done, take off the skin and flavor with pepper, salt and butter.

TOMATO SUCCOTASH.

To every half pint of tomatoes, a pint of corn, cut from the cob ; let them cook twenty or twenty-five minutes, then add a very little bread crumbs, pepper, salt and butter about the size of an egg.

TOMATO TOAST.

Toast some nice pieces of bread, and pour over them the the toma-

atoes prepared as follows :

Cook together, four medium sized tomatoes and one medium sized onion, pared and sliced fine, for three-quarters of an hour ; when done pour off the water and season to suit the taste ; then add one cup of sweet cream, or milk, and a table-spoonful of butter.

FRIED TOMATOES.

Cut the tomatoes in slices, without skinning, sprinkle pepper, salt and flour over them, and fry in butter until brown. After they are taken up, pour cream into the butter and juice, and while boiling hot pour over the tomatoes.

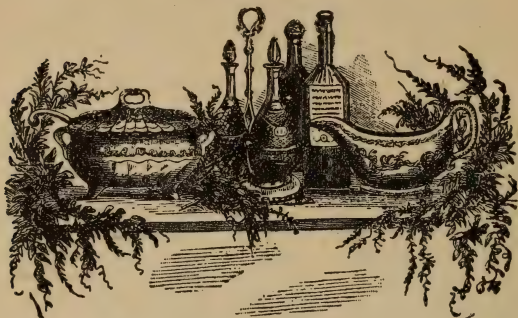
STUFFED TOMATOES.

Take large tomatoes of even size, scoop out the top of the tomato as much as you can without spoiling the shape, and fill with stuffing made as follows :

Fry a small chopped onion in a little water, when nearly done, add some bread crumbs moistened with a little milk and season with pepper and salt, put a little butter on each and bake twenty minutes, or until a nice brown.

TOMATO FRITTERS.

Scald and peel the tomatoes, put them in a chopping bowl and chop them fine, season with pepper, salt, and stir flour, with one-half teaspoonful of soda, to make a thin batter. Fry in butter or lard over a quick fire, and serve as soon as possible after taking from the fire.



How to make all kinds of Catsups, Pickles, Salads and Salad Dressings.

TOMATO CATSUP.

Boil together for one hour, then strain through a sieve; 4 quarts of tomatoes, $\frac{1}{2}$ dozen red peppers, 3 tablespoonfuls of mustard, $\frac{1}{2}$ cup of salt, $\frac{1}{2}$ cup of unground pepper, 1 teaspoonful of allspice. Bottle and seal when cold.

TOMATO CATSUP.

Skin the tomatoes, and cook them well. Press them through a sieve, and to each five pints add three pints of good cider vinegar. Boil slowly for about two hours, or until it begins to thicken; then add one tablespoonful of ground cloves, one of allspice, one of cinnamon, and one of pepper, and three grated nutmegs. Boil until very thick (six or eight hours), and add two tablespoonfuls of fine salt. When thoroughly cold, bottle, cork and seal.

CURRANT CATSUP.

Boil together for twenty minutes: 1 gallon of currant juice, 3 cupfuls of vinegar, 7 cupfuls of sugar, 3 teaspoonfuls of cinnamon, 2 teaspoonfuls of cloves, 2 teaspoonfuls of pepper, 2 teaspoonfuls of grated nutmeg. Cork and seal.

CHOPPED PICKLE.

One peck of green tomatoes, two quarts of onions and two of peppers. Chop all fine, separately and mix, to which add three cups of salt. Let them remain over night and in the morning drain well. Add half a pound of mustard seed, two tablespoonfuls of ground allspice, two of ground cloves, one cupful of grated horse-radish and three quarts of boiling vinegar.

PICKLED CUCUMBERS.

Soak ten dozen cucumbers in brine five or six hours, then scald in the following mixture ; 3 quarts of cider vinegar, 1 cup of sugar, 2 tablespoonfuls of unground cloves, 2 tablespoonfuls of unground cinnamon, 2 tablespoonfuls of unground black pepper, 2 tablespoonfuls of chopped horse-radish, 4 red peppers. When the vinegar is scalding hot, take out the cucumbers, put them in jars and pour the vinegar over them. Keep closely covered or seal.

SOUR CREAM SALAD DRESSING.

One cupful of sour cream, one teaspoonful of salt, a speck of cayenne, one tablespoonful of lemon Juice, three of vinegar, one teaspoonful of sugar. Mix thoroughly. This is nice for vegetables.

ASPARAGUS SALAD.

Boil two bunches of asparagus with one quart of wate, and one tablespoonful of salt for twenty minutes. Take up and drain in a collander. When cold, cut off the tender points and arrange them on the dish. Pour on the cream salad dressing.

SALMON SALAD.

Pour over a pound of canned salmon, a dressing made as follows : $\frac{1}{2}$ cup cider vinegar, 1 tablespoonful melted butter, 1 teaspoonful mustard, 1 tablespoonful sugar, 3 eggs, $\frac{1}{2}$ teaspoonful salt. Cook all together until it creams up nicely, when cool add a half cup milk or cream. Garnish with tender lettuce leaves.

LETTUCE SALAD.

Four heads tender lettuce, chopped fine, the yolks of three hard boiled eggs, rubbed fine. Season with salt, pepper and mustard. Heat together and add one cup of vinegar, one tablespoonful butter. Mix well and garnish with the whites of the eggs cut in rings,

CELERY SALAD.

1 boiled egg, 1 raw egg, 1 tablespoonful salad oil, 1 teaspoonful white sugar, 1 saltspoonful salt, 1 saltspoonful pepper, 4 tablespoonfuls vinegar, 1 tablespoonful made mustard. Rub the yolk to a paste, adding by degrees the the other ingredients. Beat the raw egg to a froth and stir in lastly the vinegar. Cut the celery into bits about half an inch long. Eat at once.

POTATO SALAD.

2 cups of mashed potatoes, rubbed through a collander, $\frac{3}{4}$ of a cup of chopped cabbage—white and firm, 2 table-spoonfuls of cucumber pickle, also chopped, yolks of two hare boiled eggs, powdered fine. Mix well.

DRESSING.

1 raw egg, well beaten, 1 saltspoonful of celery seed, 1 teaspoonful white sugar, 1 tablespoonful of melted butter, 1 teaspoonful of flour, $\frac{1}{2}$ cupful of vinegar, salt, mustard and pepper to taste. Boil the vinegar and pour it upon the beaten egg, sugar, butter and seasoning. Wet the flour with cold vinegar and beat into this. Cook the mixture stirring until it thickens, then pour, scalding hot, upon the salad. Toss with a silver fork and let it get very cold before eating.

FRENCH SALAD DRESSING.

Three tablespoonfuls of oil, one of vinegar, one saltspoonful of salt, one-half a saltspoonful of pepper. Put the salt and pepper in a cup to which add one tablespoonful of oil. Mix thoroughly and then add the remainder of the oil and the vinegar. This is dressing enough for a salad for six persons.

POTATO SALAD.

Ten potatoes, cut fine; the French dressing, with four or five drops of onion juice in it, and one tablespoonful chopped parsley.

COOKED VEGETABLES IN SALAD.

Nearly every kind of cooked vegetables can be served in salads. They can be served separately or mixed. They must be cold and well drained before the dressing is added.

A NEW SALAD DRESSING.

1 pint of vinegar, sugar to taste, butter size of an egg, 2 teaspoonfuls salt, 1 teaspoonful mixed mustard, pepper, celery, salt. Heat together. Beat three eggs light with one cup sour cream, pour into the hot vinegar the eggs and cream and let it all slowly thicken. This should be cooked in a double boiler; makes a quart and will keep any length of time if kept covered.

COLD SLAW.

To a small cup of vinegar add a well-beaten egg, a teaspoonful of mustard, one of sugar, a small lump of butter, season with pepper and salt. Let these ingredients come to a boil, and pour over nicely chopped cabbage, while hot.

WARM SLAW.

Boil together and pour over fine cut cabbage the yolks of two eggs, one cup of vinegar, two tablespoonfuls of sour cream, two teaspoonfuls of butter, and three tablespoonfuls of sugar.

PEACHES, PEARS AND SWEET APPLE PICKLES.

For six pounds of fruit use three of sugar, a pint of vinegar and about five dozen cloves. Bring the vinegar and sugar to a boil. Put the fruit into this, having first stuck two cloves into each peach, pear or apple. Cook until tender.

SWEET TOMATO PICKLE.

One peck of green tomatoes and six large onions sliced. Sprinkle with one cupful of salt, and let them stand over night. In the morning drain. Add to the tomatoes two quarts of water and one quart of vinegar. Boil fifteen minutes, then drain again and throw this vinegar and water away. Add to the pickle two pounds of sugar, two quarts of vinegar, two tablespoonfuls of cloves, two of allspice, two of ginger, two of mustard, two of cinnamon, and one teaspoonful of cayenne, and boil fifteen minutes.



How to Make All Kinds of Jellies, Jams, Marmalades, Apple Butter, Etc.

GRAPE JELLY.

Boil the grapes in a porcelain kettle and to every four quarts of grapes use half a pint of water. Boil until soft and then strain through a sieve or cloth. Boil the juice twenty minutes and add a pound of sugar to every pound of juice. Then let it boil ten minutes and pour into jelly glasses.

CURRENT JELLY.

Put the currants into a vessel and put this vessel into another containing boiling water. Boil until thoroughly scalded, then squeeze them through a cloth. Put a pint of sugar into every pint of juice and boil on the fire, stirring it frequently. Five minutes boiling is sufficient.

BLACKBERRY JELLY.

Mash the berries thoroughly, squeeze and strain the juice from them, put it on to boil a half hour with sugar, pint for pint. Pour into jelly glasses and place a piece of paper dipped in brandy over the top, before fastening the lid.

STRAWBERRY JELLY.

To every two pounds of sugar add three quarts of strawberries. Mash and let stand for two hours. Then press the juice from the berries. Then dissolve one box of gelatine in half a pint of cold water. Then mix, and add the juice of a lemon. Strain, and pour into glass dishes to harden.

RASPBERRY JELLY.

Raspberry jelly is made the same as strawberry.

LEMON JELLY.

Cut 6 bananas lengthwise. Slice 6 oranges. Dissolve a little more than $\frac{1}{2}$ box of gelatine in $\frac{1}{2}$ pint of cold water; then add $\frac{1}{2}$ pint of boiling water, the juice of 3 lemons, and sweeten to taste.

CLEAR APPLE JELLY.

Pare and core 6 dozen of sour apples, put into a pan with water to cover them, boil gently until soft, let cool, and strain through a bag; to each pint of juice add one pound of sugar and the peel of two lemons, boil to the stiffness of calf's foot jelly, skim, and add the juice of one lemon.

FRUIT JELLY.

Pare and slice very thin 8 oranges and 6 bananas, and arrange in layers in a charlotte-russe mold. Make a jelly of half a box of gelatine soaked in half a pint of cold water for two hours, then add half a pint of boiling water and the juice of three lemons; sweeten to taste; when it has partly cooled, pour this jelly over the fruit and set away in a cool place to harden.

ORANGE JELLY.

The juice of 8 oranges, juice of 2 lemons, 1 pound of white sugar, $\frac{3}{4}$ of a box of gelatine, soaked in 1 pint of water for half an hour, then add $\frac{3}{4}$ of a pint of boiling water, stir thoroughly, and strain through a flannel bag into moulds.

CIDER JELLY.

Let three pints of cider come to a boil, and pour it over a box full of gelatine, that has been soaked in cold water for two hours, and add two cupfuls of sugar. Strain, pour into moulds and put aside to harden.

TOMATO JAM.

Stew one gallon and a half of apples, and one gallon of tomatoes separately. Then put them together in a kettle, and add six pounds of sugar, one ounce of ground cloves, and one ounce of ground cinnamon.

CHERRY MARMALADE.

Strain the cherries and add to every three pounds of cherries three-fourths of a pint of currant juice. Now add three-fourths of a pound of sugar to every pound of fruit. Put on the fire and stir thoroughly. When it has boiled to thick jelly pour it into jars.

APPLE BUTTER.

Stew your apples as you would for sauce, and to every two gallons of cooked apples add three cups of cider vinegar and four pounds of sugar. Boil this down about one-third, or until there is about one and a half gallons. Flavor, when nearly done, with essence of, or ground cinnamon.

CURRANT AND RASPBERRY JAM.

INGREDIENTS.—To every pound of red currants allow $\frac{3}{4}$ pound of raspberries, weighed after the stalks are removed, and 1 pound of loaf sugar.

MODE.—Place the fruit in the above proportion in the preserving-pan, with 1 pound of sugar to every pound of fruit, stir and boil for three-quarters of an hour after the mixture boils fast; remove the scum as it rises. Put the jam in pots.

GRAPE JAM.

INGREDIENTS.—Unripe grapes, sugar.

MODE.—The grapes must not be quite ripe. and they should be most carefully picked and gently washed, all unsound ones being taken out. Allow half a pound of sugar to one pound of grapes. Put the fruit into a preserving-pan, without water layer for layer with sugar. Boil rather quickly, stirring always. Pour, when cool, into pots as usual.



HOW TO MAKE ALL KINDS OF VINEGAR.

CIDER VINEGAR.

Vinegar making is easy enough if you have good cider and patience. Keep the barrel in a warm place, filled up to the bung, and refilling as needed. When done working draw off into an old vinegar barrel, filling it not over two-thirds full. Keep the bung hole covered with a piece of screen to exclude vinegar flies. If kept in a warm place it may make good strong vinegar in less than six months' time. In an ordinary cellar it will take longer.

COMMON VINEGAR.

8 gallons rain water,
3 quarts molasses,
2 yeast cakes.

Shake well. Put in a warm place, and in ten days add a sheet of wrapping paper covered with molasses and torn into strips; it makes the mother.

VINEGAR FOR PICKLES.

4 quarts of vinegar; 2 cups of sugar; 3 nutmegs, grated; 2 large onions, sliced; $\frac{1}{2}$ cup of grated horse-radish; 1 ounce of mustard seed; 1 ounce of celery seed; 1 ounce of salt; $\frac{1}{2}$ ounce of mace, $\frac{1}{2}$ ounce of black pepper; 1 ounce of allspice.

VINEGAR FOR SWEET PICKLE.

6 pounds of fruit ; 2 pounds of sugar ; 1 quart of vinegar ;
2 ounces of cassia buds or cloves.

VINEGAR FOR SPICED TOMATOES.

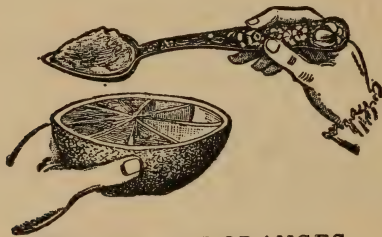
1 quart of vinegar ; 2 ounces of sugar ; 1 ounce of cloves ;
1 ounce of cinnamon ; 1 ounce of allspice ; 1 ounce of ground
black pepper.

VINEGAR FOR GREEN TOMATO PICKLE.

3 chopped red peppers ; a handful of grated horse-radish ;
 $\frac{1}{2}$ gallon of vinegar ; $\frac{1}{2}$ pound of sugar.

VINEGAR FOR SWEET PICKLED PEACHES
AND APPLES.

4 pounds of sugar ; 1 quart of vinegar ; 2 ounces of un-
ground cinnamon.

*HOW TO EAT ORANGES.*

Cut the oranges across the sections as shown in the above illustration. Then take a small spoon, and it will fit into each section, and the meat is easily and daintily removed.

There are special orange spoons, which are very nice for those who can afford them. An ordinary teaspoon will answer the purpose very nicely.



HOW TO CAN ALL KINDS OF FRUIT.

1. Always pick the fruit when it is perfectly dry, for when it is rain-soaked it spoils very easily and will not keep as well.
2. Look it over very carefully, removing all insects and hulls, and if sandy, place it in a colander, and turn cold water over it, and the sand will pass through the holes in the bottom.
3. Add sugar at the rate of two teacupfuls to a quart of fruit, but more or less may be added according to taste and kind of fruit.
4. Place the fruit in porcelain or granite-ware kettles, and heat till cooked through.
5. Wring a towel, or piece of cotton cloth, out of cold water and wrap it tightly around the can, then set the can in a tin containing one-half inch of water.
6. Now place a long-handled spoon in the can and then with a small tin cup fill as rapidly as possible. When nearly full give it a good stir with the spoon to bring all the air bubbles to the top; fill full, turn down the cover as tight as you can and set aside to cool.
7. When cool, tighten the cover again and set away in a cool, dry, dark place. Look at the cans occasionally, and if they show signs of working, re-cook them again.
8. If your cans are perfect and the cover as tight as you can turn it down upon the rubber, you will have no trouble; the fruit will keep perfectly well.
9. If the fruit settles somewhat in the cans do not be alarmed, as most fruit shrinks some, strawberries most of all. If there is considerable juice left after the cans are all filled, it can be made into jelly, or it may be put with an equal amount of pieplant, cooked and canned. This makes a very palatable sauce for Winter.

HOW TO MAKE ALL KINDS OF PRESERVES.**PRESERVED CHERRIES.**

Stone the cherries, preserving every drop of juice. Weigh the fruit, allowing pound for pound of sugar. Put a layer of fruit for one of sugar until all is used up; pour over the juice and boil gently until the syrup begins to thicken.

The short-stem red cherries, or the Morellas are best for preserves. Sweet cherries will not do.

PRESERVED STRAWBERRIES.

Pound for pound. Put them in a preserving kettle over a slow fire until the sugar melts. Boil twenty-five minutes, fast. Take out the fruit in a perforated skimmer and fill a number of small cans three-quarters full. Boil and skim the syrup five minutes longer, fill up the jars, and seal while hot. Keep in a cool, dry place.

PEAR PRESERVES.

Weigh the pears after they are pared, and to every pound add three-quarters of a pound of loaf sugar, water enough to prevent them from burning, and the peel of a small lemon cut very thin. Let them stew gently for six or seven hours.

PEACH PRESERVES.

Pare, stone and quarter ripe free-stone peaches. To six pounds of peaches allow three pounds of brown sugar. Put the sugar over the peaches and let them stand over night; next morning place them in a preserving-kettle and boil for two hours, keeping it well skimmed.

CRAB APPLE PRESERVES.

If Siberian crabs, wipe them only, if French, they must be pared. Put the apples in and let them simmer until they are done, into a boiling syrup, made from two pints of lump sugar and one pint of cider. Reduce the syrup, and skim until it is thick enough, and pour it over the fruit which has been placed in earthen or glass jars.

RHUBARB PRESERVES.

Slice six oranges into a stew pan, with the rind cut very small, a quart of rhubarb, cut fine, and two pounds of sugar. Boil the whole down as any other preserves.

PRESERVED APPLES.

Firm, well-flavored pippins or bell-flower apples make an excellent preserve, prepared in the same manner as quinces. A few quinces cut up among them, or the juice of two lemons to every three pounds of fruit improves them.

QUINCE PRESERVES.

Into two quarts of boiling water put a quantity of golden pippin apples, not cut very thin, and not pared, but wiped clean. Keep them closely covered, boil quickly till the water becomes a thick jelly, then scald. To every cupful of apple jelly put a half pound of sugar; boil it and skim it clear. Put those quinces that are to be done whole, into the syrup, and let it boil very fast; those that are to be in half by themselves; skim it, and when the fruit is clear, put some of the syrup into a glass to try whether it jellies, before taking from the fire. The quantity of quinces is to be a pound to a pound of sugar, and a pound of jelly already boiled with the sugar.

RIPE TOMATO PRESERVES.

7 lbs. round yellow or egg tomatoes—peeled.

7 lbs. sugar and juice of three lemons.

Let them stand together over night. Drain off the syrup and boil it, skimming well. Put in the tomatoes and boil gently twenty minutes. Take out the fruit with a perforated skimmer, and spread upon dishes. Boil the syrup down until it thickens, adding, just before you take it up, the juice of three lemons. Put the fruit into jars and fill up with hot syrup. When cold, seal or tie up.

GREEN TOMATO PRESERVES.

8 lbs. small green tomatoes. Pierce each with a fork.

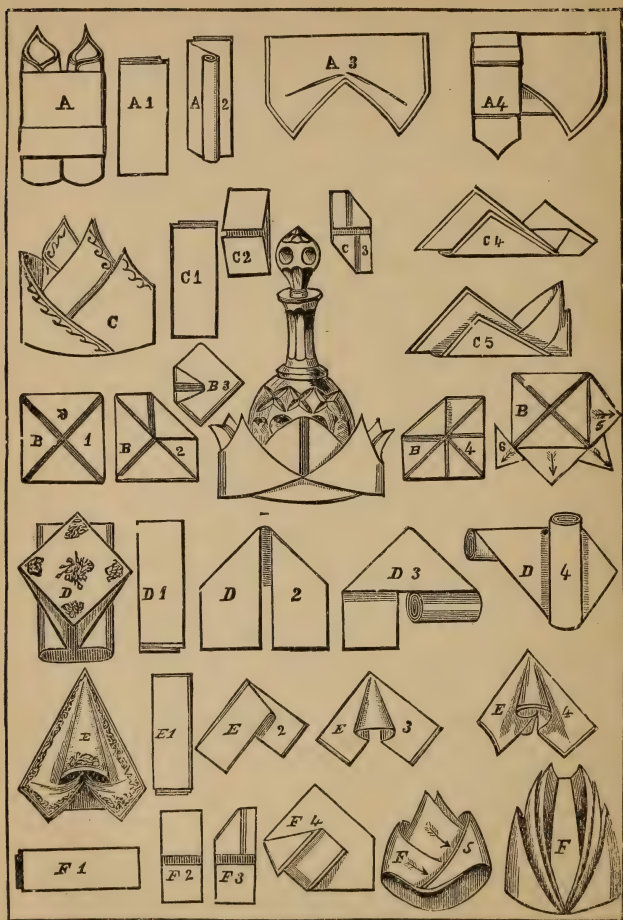
7 lbs. sugar.

4 lemons—the juice only.

1 oz. ginger and mace mixed.

Heat all together slowly, and boil until the fruit is clear. Take it from the kettle in a perforated skimmer, and spread upon dishes to cool. Boil the syrup thick. Put the fruit into jars and cover with hot syrup.

How to Fold Napkins.



NEW DESIGNS

AND

A Few Practical Rules for Folding Napkins.

1. In order to make a napkin ornamental as well as useful, various methods are employed of folding them into artistic forms. It requires some study and care in order to develop elegant results.

2 To fold damask napkins effectively and elaborately they should be of fine, stout quality and perfectly square.

3 Each napkin previous to being foldèd, should be dampened with raw starch and smoothed with a hot iron, and then fold while warm.

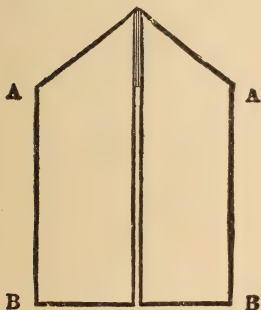


Fig. 1.

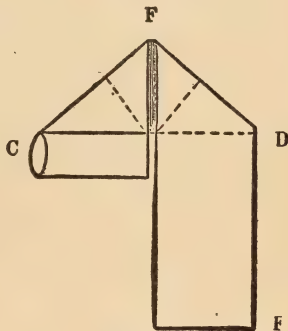


Fig. 2

THE ESCUTCHEON.

The Escutcheon can be made very well with old or even crumpled damask, though, of course, napkins should always be scrupulously clean and smooth. First fold the serviette in half, lengthwise; and then fold it in half again lengthwise, keeping the edges to the lower end, which comes where in the diagram A A and B B are marked (see fig. 1). It is necessary to be always very precise in making the folds, bringing the edges and corners exactly to meet, a rule which applies to all the designs; but without strict attention to which, the more elaborate patterns cannot be represented.

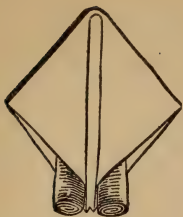


Fig. 3.



Fig. 4.

Now turn over each end of the napkin (which you have already folded in four), in the manner shown in fig. 1, creasing it quite flat. Then take one of the ends and roll it up in the manner shown in fig 2, from C to D. Take the other end, E, and roll it in the same way. It is to be observed that these rolls are brought exactly to meet (not to overlap) the triangle formed at the top. It is, however, necessary to remark that the napkin is to be rolled in the reverse way from that apparent in the illustration; that is, to be rolled under not over, a difference which must not be neglected. Keep the rolls, one in each hand, and with a twist of the wrist

bring over the roll C, to the point F (causing the fold marked by the dotted line), and with a twist of the other wrist bring the roll up to the same point to match it. Then lay it flat on the table, the rolls underneath (see fig. 3), and keeping them down with one hand, raise the other part and shape it as shown in fig. 4.

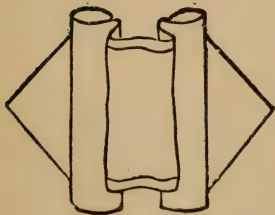


Fig. 1.

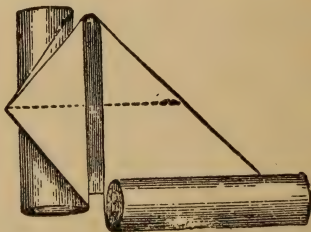
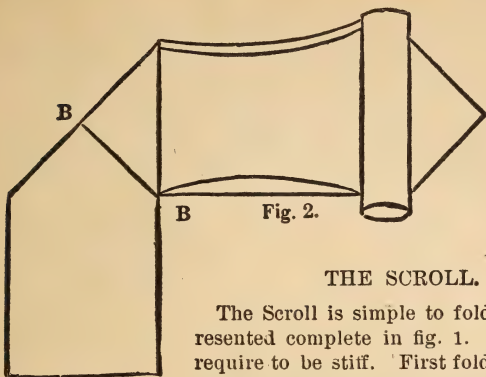


Fig. 3.

THE SCROLL. (See opposite page.)



THE SCROLL.

The Scroll is simple to fold. It is represented complete in fig. 1. It does not require to be stiff. First fold the napkin

four times lengthways. Fold down one end in the manner shown at A, in fig. 2. Then fold the end A completely across, forming the line B. B. Roll up the end A, and produce the fig. 3. Treat the other side in the same way. Fig. 3 illustrates the process.

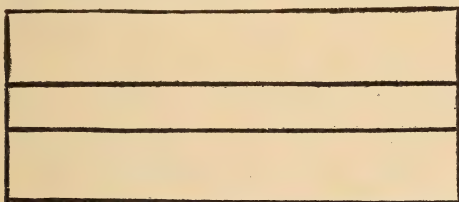


FIG. 1.

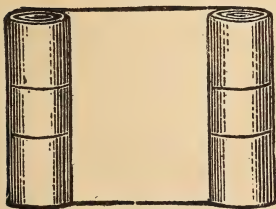


FIG. 2.

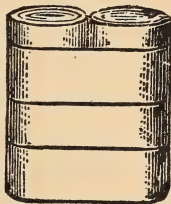


FIG. 3.

LORGNETTES.

Are very easy indeed, and are a very neat design. Fold the serviette in half, lengthways. Fold back an inch or an inch and a half at the double end and bring it to the centre, in the same way observable in fig. 1. Turn it over on the other side and roll both ends, one at a time, to the centre, taking care to press in with the fingers, as it is rolled, the tendency to bag up, so as to keep it smooth outside, and the centre band tight. Stand it upright.

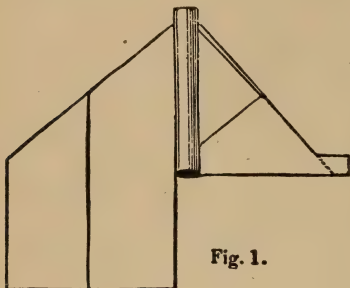


Fig. 1.

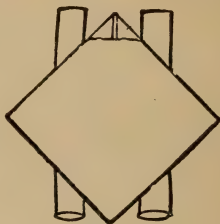


Fig. 3.



Fig. 2.



Fig. 4.

THE SHIELD.

The Shield is almost identical with the Escutcheon; there is however, a slight difference, which forms a little variety and practice in the art of napkin-folding.

First form fig. 1, as for the escutcheon. Next roll up the two ends in the manner shown in fig. 2, that is, make the rolls outwardly, not under as in the previous direction. The napkin will not resemble fig. 3. Then set it into form. The face of it will stand perfectly upright and resemble fig. 4.

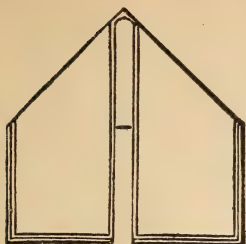


FIG. 1.

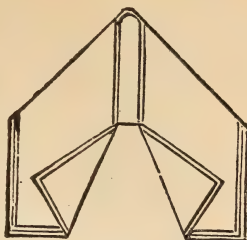


FIG. 2.



FIG. 3.

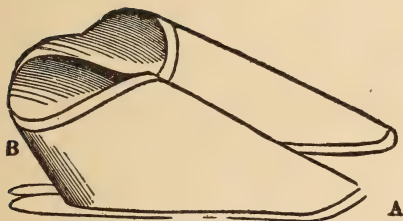


Fig. 4.

THE SLIPPERS.

The Slippers are very easy to make. Double the napkin four times length-ways. Then fold like fig. 1. The ends are simply rolled, taking the corners in the method shown in fig. 2, bringing them over as shown in fig. 3, and with another turn forming the Slippers, (fig. 4.)

Secure the point at A, with the left hand, whilst rolling up the other side, and then hold both points together with the left hand and place the right in the top of the Slippers. A few flowers in the hollows of the folds is a pretty addition.



Fig. 1.

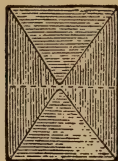


Fig. 2.



Fig. 3.

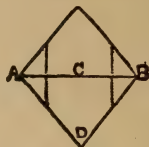


Fig. 4.

THE MITRE.

The Mitre is a well-known device, and one which always looks effective. It is not unlike the Crown. Fold the damask in half, and turn down the two corners to meet at both ends, in the manner shown in fig. 1, taking care to let them meet very exactly and not overlap. Fold it in half at the line A-B, fig. 1 to ascertain the centre. Open this last fold again and bring the two points to the centre like fig. 2. Fold these together at the dotted line with the point outside, let down one of these corners again, and turn in the two points A and B also, to make a triangle uniform with the others. It will now resemble fig. 3.



Fig. 5.

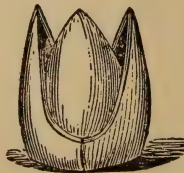
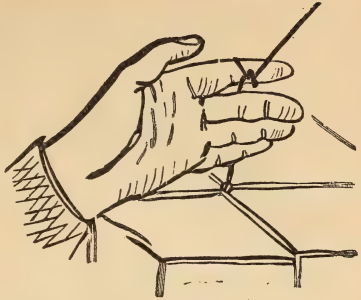
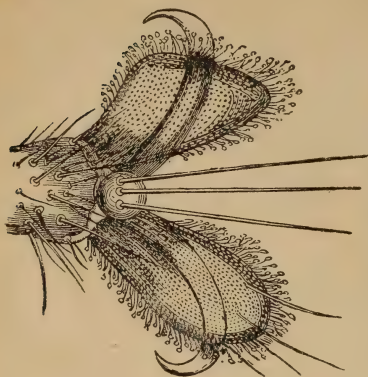


Fig. 6.

Turn the napkin over, let down the point on that side, it will then resemble fig. 4. Turn in the corners A and B, by the line marked. Turn up the point D to its former position, it will now resemble fig. 5. Slip the hand inside the hollow to be found at the broad end, and shape it like a cap, and the Mitre is complete.

It is easy to break a string, if you know how. - Woman need not hunt for a knife or a pair of scissors after tying a bundle, nor saw the string over the edge of the counter. The grocer's loop does the business. Hook the first finger of the left hand over the string, giving the finger a twist, or rather, bring the palm upward. Then roll the finger over backward until it is tight against the bundle, drawing tight the cord, which is held in the right hand all the time. Press the thumb against the loop; then jerk the cord suddenly with the right hand, and the string cuts itself.

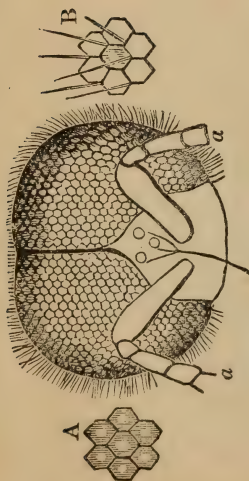


Parts of Insects Greatly Magnified.

FOOT OF A FLY.



FOOT OF A SPIDER.

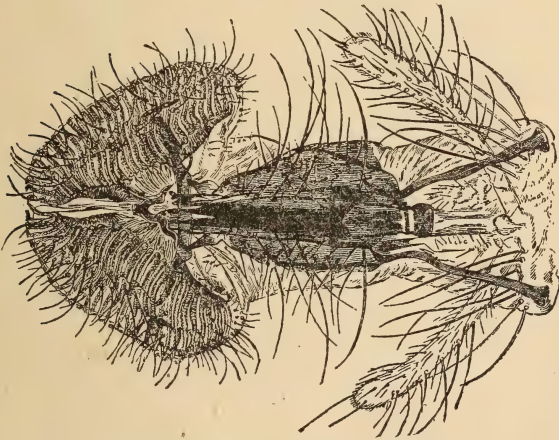


HEAD AND EYES OF A BEE.



LEGS OF A CATERPILLAR.

INSECTS
OF THE
HOUSE, GARDEN AND FIELD,
THEIR INJURY TO VEGETATION,
AND
NEW AND SCIENTIFIC METHODS TO
DESTROY THEM.



THE TONGUE OF A FLY, GREATLY MAGNIFIED.

NEW AND NEW
RECEIPTS REMEDIES.



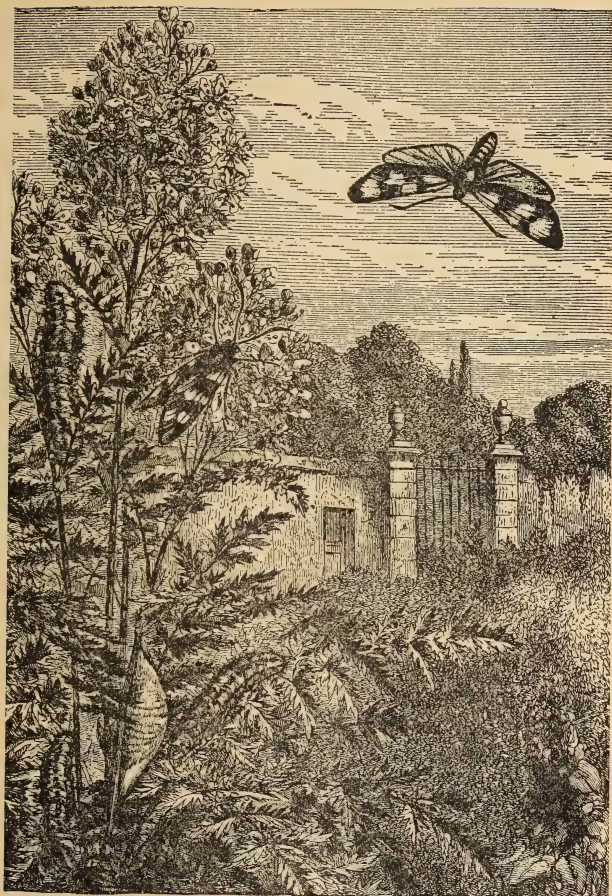


THE ENEMIES OF THE FARM AND GARDEN.

There is a vast variety of insects that injure or destroy the flowers, vegetables, and shrubbery of our fields and gardens.

Many of these insects are preyed upon by native birds, and it is strange that so few of our gardeners are familiar with this fact. Many of them, while they are in the garden or field battling with the destructive insect, their sons, with air gun and sling, are destroying their best friends. Birds are the friend of the farmer and gardener, and should be protected against the ruthless onslaught of cruel and thoughtless boys.

Many farmers kill the robin and other birds on account of the few berries or cherries they eat, but they ignorantly destroy their friends instead of their enemies. The principal food of birds is insects, and the truly wise farmer should protect his birds, quails and prairie chickens just as much as he does his domestic fowls.



A bird, at a small estimate, devours about six millions of caterpillars during the months of April, May, June and July. A million birds would thus devour **6,000,000,000** moths yearly.



New Remedies, and How to Apply Them.

1. LARGE ANTS.

There are certain larger ants that are frequently troublesome on lawns, by making their nests above the surface of the grass, and thus disfiguring them. A simple way of destroying these is recorded by Dr. Riley as follows: A number of holes are punched in the nest by means of a pointed stick; a table-spoonful of bisulphide of carbon is then poured down each hole, and a damp blanket is thrown over the nest for a few minutes—then the blanket being removed the bisulphide is exploded at the mouth of each hole by means of a light at the end of a pole. The slight explosions drive the poisonous fumes down through the underground tunnels, killing off the ants in enormous numbers.

2. BED BUGS.

Spraying the cracks of walls, beds, etc., where these insects occur, with benzine, is the best manner of destroying them. This substance kills the eggs as well as the adults. Great care, of course, should be taken to prevent their ingress to the house.

3. COCKROACHES AND CROTON BUGS.

The best remedy for these pests is a good quality of insect powder, such as Buhach.

4. HORSE FLY REMEDY.

The little black fly, injurious and annoying to horses and cattle in the months of July and August, is very difficult to manage, but in case they are very severe, or a horse or cow or other animal is sick, apply Carbolated Fish Oil.

5. CATTLE AND HORSE LICE.

The best method of destroying lice on cattle and other domestic animals is to apply a thoroughly prepared emulsion of kerosene and soap. If this is well made it can be applied to cattle and horses, hogs and sheep, with no danger of injury to them, while it will destroy all the lice with which it comes in contact.

6. THE CLOVER HAY-WORM.

It will readily be seen that these insects are more likely to prove troublesome when old hay is left over from season to season for them to breed in. Consequently hay mows should be thoroughly cleaned out each summer, and new stacks should not be put on old foundations until all of the leavings of the previous season are removed. Hay which is thickly infested by the worms should be burned.

7. THE CLOVER LEAF-BEETLE.

The only remedy yet suggested is that of plowing under infested fields during May or June, thus destroying the immature stages.

8. THE RASPBERRY ROOT-BORER.

No other remedy than that of cutting out the larvæ, or pulling up and burning the infested canes has yet been discovered. Fortunately this insect is rarely sufficiently numerous to do serious injury. It occurs in wild as well as cultivated sorts.

9. THE RASPBERRY SLUG.

These insects can be easily destroyed by dusting or spraying the infested bushes with powdered hellebore. In spraying, use from one-half to one pound of hellebore to fifty gallons of water.

10. PLUM CURCULIO AND OTHER INSECTS.

As soon as the blossoms have all fallen, and never before, spray trees with Paris green and water (3 oz. to 50 gals.), and repeat the operation two or three times at intervals of ten days or two weeks.

11. CODLING MOTH, PLUM CURCULIO, AND OTHER PEAR INSECTS.

Soon after the blossoms have fallen spray the trees with Paris green in water—3 ounces to 50 gallons—to destroy the Codling Moth and Curculio. Repeat the application ten days or two weeks later. If the Pear-tree Slug appears in the latter part of June, spray again then. In the case of danger from the bark-lice or apple-tree borers, carry out treatment recommended under the special head.

12. OTHER APPLE INSECTS.

As soon in spring as the blossoms have entirely fallen, the trees should be sprayed with Paris green and water—3 ounces to 50 gallons. The application had generally better be repeated ten days or two weeks later. This will check both the fruit and leaf-eating insects.

Protection Against Moths.

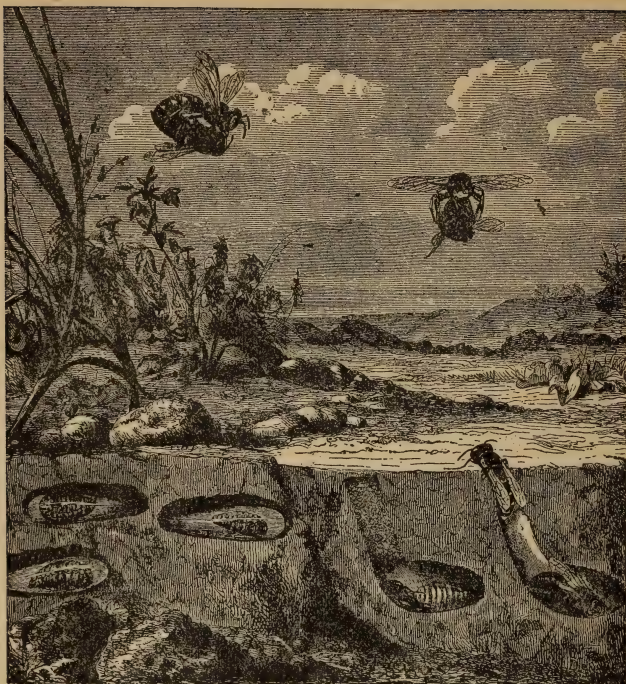


THE COMMON MOTH.

In May the clothes-moth begins to fly about our rooms. It is a small, light, buff-colored "miller," dainty and beautiful on close inspection. Its highest mission seems to be to teach us to set our affections only upon incorruptible treasures which "moth and rust cannot destroy." But it is

necessary to keep a sharp lookout for the safety of our furs and flannels, and we must wage war upon it. In the first place we must carefully put away everything we can, upon which it will lay its eggs. If we pack away our furs and flannels early in May, before the moth has begun to lay its eggs, and leave them in boxes and bags so tight that the flying moth cannot squeeze in, no further precaution is necessary. Clean paper bags are recommended for this purpose—those used for flour and meal bags. They should be without holes or opening anywhere. These bags, when filled and closed firmly, may be put away on closet shelves or in loose boxes, without danger to their contents, so far as moths are concerned, without need of camphor or other strong odors to drive moths away. Furs are usually sold in boxes in which they may be kept. Beat them well when you finally put them away for the season. If you delay putting them away until June, examine the furs well, and shake and beat them thoroughly, in order that any moth eggs that may possibly have been laid in them may be thoroughly removed or killed. Furs sealed up early in May need no camphor or tobacco or other preventive. Muff and tippet boxes should be tied up securely in bags, or made safe by mending holes and pasting a strip of paper around the juncture of the cover with the box below, so as to close all openings. Woolen garments must not hang in closets through the summer, in parts of the country where moths abound. They should be packed away in tight trunks or boxes, or sealed up in bags. Woolen blankets must be well shaken and carefully put away, unless they are in daily use. Early in June the larvæ of the moth begin their ravages, and then, unless you dwell in places where moths are not found, look sharp, or you will find some precious thing, that you have forgotten—some good coat unused for a few weeks, or the woolen cover of a neglected piano—already riddled by the voracious moths. It is their nature to eat until they have grown strong enough to retire from the eating business, and go into the chrysalis condition.

Some things cannot be well packed away in tight boxes and bags, and among these it is well to scatter small lumps of camphor or clippings of Russia leather. Some use tobacco, though I think camphor is usually preferred. It is said that powdered black pepper, scattered under the edge of carpets, will preserve them from attacks.



Modern Remedies for Insect Extermination.

1. **Various Kinds.**—The most effective remedies for the extermination of insects are poisons. The most popular are Paris Green, London Purple and Slug Shot. The most of the patent remedies for insect extermination are made up largely from these preparations.

2. **Effects upon the Insects.**—There are but two principal methods used in the extermination of insects: First, giving internal poisons, or those which take effect by being eaten with the ordinary food of the insects. The second method for the destruction of insects is, to apply external irritants, or those which affect the outside—closing the breathing pores of the insect, or causing death by irritating the skin.

3. **Paris Green.**—Paris Green is made up of arsenic and copper. It contains about sixty per cent. arsenic. It is the basis of all the best insect sprays that are now in use,

Place three ounces in fifty gallons of water, or smaller quantities in proportion, and it makes one of the best remedies for the extermination of insects upon foliage now known. Care must be taken that the solution is not any stronger than the above preparations, or it will kill the leaves.

4. London Purple.—London Purple is obtained in the manufacture of aniline dyes. It contains about fifty-five per cent. of Paris Green. It may be used the same way as Paris Green, but it is more liable to injure the foliage of trees and plants. If London Purple is used, the solution should be much weaker, about two ounces to forty gallons of water.

5. Hellebore.—Hellebore is the powder made from the roots of a plant known as White Hellebore. It is a very mild poison, and kills insects by contact, or by being eaten. It may be used dry, or it may be applied by mixing a tablespoonful of it in a pail of water and use it as a sprinkle or spray.

6. Kerosene Emulsion.—This is prepared by adding two parts of kerosene to one part of a solution made by dissolving half a pound of hard soap in one gallon of boiling water, and churning the mixture through a force pump with a rather small nozzle until the whole forms a creamy mass, which will thicken into a jelly-like substance on cooling. The soap solution should be hot when the kerosene is added, but of course must not be near the fire. The emulsion thus made is to be diluted, before using, with nine parts of cold water. This emulsion is an excellent remedy to be used in spraying for the extermination of various destructive insects.

7. Tobacco.—A decoction of tobacco juice from the stems and refuse of tobacco is used by many for insects, and the stems and refuse after being steeped make an excellent fertilizer around the vines, and will also keep off the insects.

8. Benzine and Gasoline.—These are volatile remedies which can be used for destroying grain insects, ants, grape insects and other insects which may be reached by the vapor. Place the benzine or gasoline in dishes beneath the vines or bushes or grain, and the fumes arising will exterminate or drive away the pests.

9. Coal Tar.—Coal tar is used in the West to destroy the Rocky Mountain Locusts, being placed on the rails and boards upon which the locusts jump. It is also employed to prevent the migrations of Chinch Bugs. Make a shallow ditch and pour in the tar along the border of it. It will keep the Chinch Bugs from entering the adjoining field.

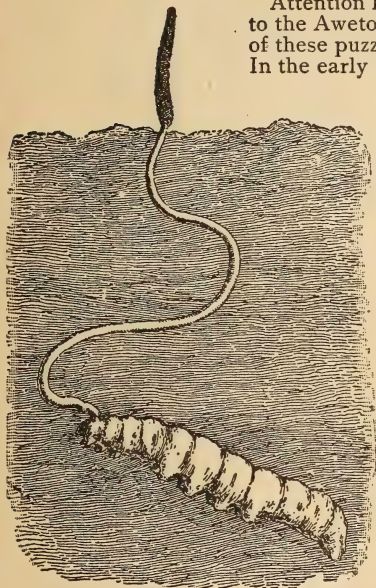
A NEWLY DISCOVERED INSECTICIDE.

Thought to be More Desirable than Paris Green.

A new and important discovery in the domain of pomology has been made by F. C. Moulton, of the gypsy moth commission, Malden, Mass. Arsenate of lead was the substance used, which was prepared by dissolving eleven ounces of acetate of lead and four ounces of arsenate of soda in 150 gallons of water. These substances quickly dissolve and form arsenate of lead, a fine white powder, which is lighter than Paris green, and while being fully as effective in its operation in destroying insect life, is far preferable for several reason: If by any means the mixture happens to be used stronger than necessary to destroy insect life, even three or four times the necessary strength, it in no wise injures the foliage of the plants upon which it is sprayed. This is greatly in its favor, for often in using Paris green for Potato beetle larvæ and for the codlin worms, as much injury results from the poison burning the foliage as would result from the insect if let alone.

This is a better insecticide than Paris green under all circumstances and for all insects, says Prof. Fernald. It has the advantage of being readily seen on the leaves, so that one can tell at a glance which have and which have not been sprayed, which is often of great convenience. Being lighter than Paris green, it does not settle so quickly, and as a result can be distributed more evenly over the foliage. A great objection to the use of Paris green is the liability of using an over-dose, and thereby injuring the foliage of the plants sprayed. With the arsenate of lead, it can be used, if necessary, in the proportion of 25 lbs. to 150 gallons of water, without injury to the foliage. Prof. Fernald advises the addition of two quarts of glucose, or if that cannot be obtained, two quarts of molasses to each 150 gallons of water, used for the purpose of causing the insecticide to adhere to the leaves. Experiments have shown that the insecticide will remain on the trees for a long time, even after heavy rains, and we infer, prove effective. The cost of these chemicals is given as 8 cts. per lb. for arsenate of soda and 14 cts. per lb. for acetate of lead, at wholesale. It should be borne in mind that these substances are all poisonous, and should be handled with proper care.

A VEGETABLE CATERPILLAR.



Attention has recently been called to the Aweto of New Zealand as one of these puzzling products of nature. In the early stage of its growth it is

a perfect caterpillar, growing to the length of three and a half inches. It is always found in the neighborhood of the Rata-tree, a large scarlet-flowered myrtle, and habitually buries itself a few inches under ground.

When the Aweto is fully grown, it undergoes a wonderful change. The spore of a vegetable fungus fixes itself directly on the caterpillar's neck, takes root, and grows, like a diminutive bulrush, from six to ten inches high, without leaves, and with a dark-brown head.

This singular stem penetrates the earth over the caterpillar and stands up a few inches above the ground. The root grows at the same time into the body of the insect, exactly filling every part without altering its form in the slightest degree. It simply substitutes a vegetable for an animal substance.

As soon as this process is completed, both the caterpillar and fungus die, and become dry and hard, and the thing is then a wooden caterpillar.



All Kinds of Receipts for Spraying Plants, Trees and Shrubbery.

INSECTS WHICH STING THE FRUIT AND DEVOUR THE FOLIAGE.

Use Paris Green or London Purple in proportion of one pound to 250 gallons of water, and apply just after the bloom has dropped, then once or twice thereafter, ten days apart.

FOR INSECTS LIKE PLANT LICE.

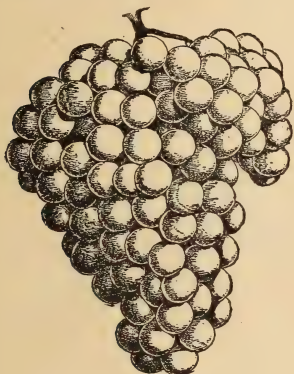
Make a kerosene emulsion of one-fourth pound of soap, one pint of kerosene, two quarts of hot water. One quart of this mixed with twelve quarts of water and spray as soon as the first broods appear.

FOR FUNGUS ATTACKS, SUCH AS MILDEWS, ROTS, SCAB, ETC.

RECEIPT: *Dissolve six pounds of Sulphate of Copper in sixteen gallons of water, 4 pounds of lime in six gallons of water. Apply to grapes early in the season, other fruit after bloom.*

SECOND RECEIPT: *Three ounces Carbonate of Copper in one quart of Ammonia, and diluted in twenty-five gallons of water. The two above receipts are effective for grape rot, apple and pear scab, and leaves no coloring upon the fruit. Apply before any foliage appears and then after the foliage is out, and fruit formed, three to six times according to the season.*

The Vermorel Nozzles are best, they throw a fine spray and use less material, and for high trees only a little longer hose is necessary.



GRAPES.

The grape vine flea beetle, and the grape phylloxera can be destroyed by spraying with the kerosene emulsion. The former can also be destroyed with London purple or Paris green.

For Mildew or Black Rot use a solution of potassium sulphide—*one ounce to five gallons of water*. Spray after leaves begin to start; again just before blooming; thence once in two weeks until fruit is of good size.

HOP PLANT LOUSE.

This insect appears in June or early in July, and is very destructive. Spray as soon as the pests appear with kerosene emulsion. This is guaranteed to kill the lice in thirty minutes after application.

CABBAGE.

To destroy the cabbage maggot, spray the roots with two ounces white hellebore in three gallons of water. Kerosene emulsion is also recommended; in either case the earth should be pushed away by hand and the liquid forced about the roots. To destroy the cabbage worm, spray with hot water at 130 degrees Fahrenheit, or with kerosene emulsion. The green cabbage worm can be destroyed by spraying with pyrethrum two tablespoons to two gallons of water.



HOW TO SPRAY FRUIT TREES AND SHRUBS.

**Or How to Raise Perfect and Well Developed Fruit
Every Year.**

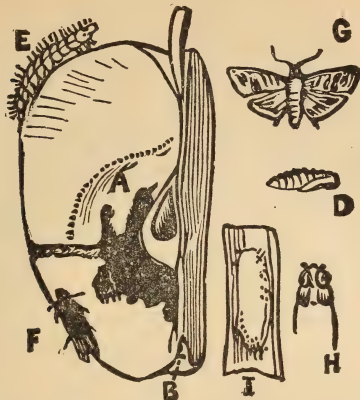
No. 1. Farmers and gardeners must come to it. Every year's experience shows conclusively that our fruit is not only becoming more imperfect, but is decreasing in quality and quantity.

No. 2. Farmers must meet the new conditions, be prepared for new duties, or they will soon lose their beautiful fields and fruit gardens.

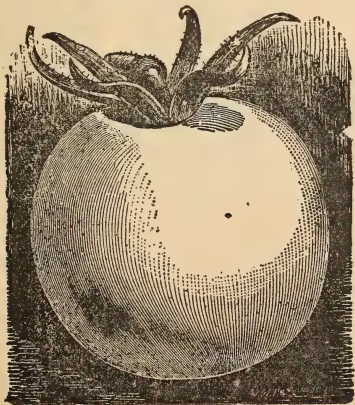
No. 3. Spraying is no longer an experiment, but a science, and but few men who keep a fruit orchard, potato field, grape vineyard, or cotton field, hop field, or tobacco field, must resort to spraying at the proper time.

No. 4. To show the benefit of spraying select a portion of your trees or shrubbery and carry out the instructions and receipts given below and you will demonstrate to your own satisfaction in a single season the wonderful benefit of spraying and protecting your fruits.

HOW TO PROTECT APPLE TREES AND CHERRY TREES.



For the prevention of leaf blight spray as soon as the leaves are full grown with Bordeaux mixture or Ammonical carbonate of copper. To destroy the codling moth, canker worm and curculio, spray with Paris green or London purple, one-fourth pound in forty or fifty gallons of water, soon after the blossoms fall, and again two weeks later. To destroy the aphid or plant lice, spray with kerosene emulsion as soon as the pests appear. To destroy the web worm spray with London purple or kerosene emulsion about August 1st or 10th, or as soon as they appear. This application should be made during the middle of the day, when the worms are out of their webs and feeding on the leaves.



TOMATOES.

The green tomato worm can be destroyed by spraying with London purple, one-fourth pound to sixty gallons of water. This should not be used after the tomatoes have begun to ripen.

CHINCH BUG ON CORN.

Can be destroyed with the kerosene emulsion. Every farmer should learn to make this emulsion, as it is a most useful insecticide. It is especially valuable for killing lice on cattle and hogs. Paris green will not kill chinch bugs. Apply the emulsion with the spray pump.

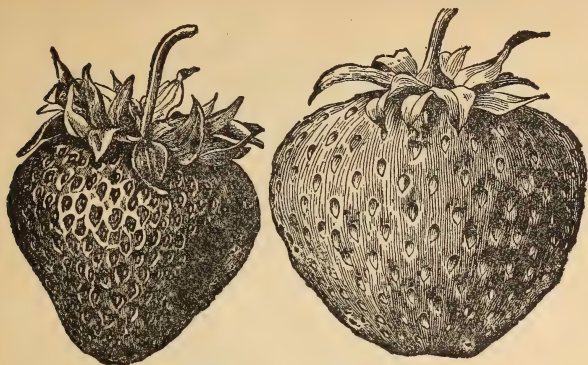
PEACHES.

Peaches if attacked by the black peach aphid, spray with kerosene emulsion. The plum curculio frequently attacks the peach, in which case spray with Paris Green, two ounces to fifty gallons of water ; be sure to keep it well stirred, and use with caution. Never use London purple on peach trees.



For Roses use Hellibore. A tablespoonful in a pail of water.

Small fruits and bushes can be sprinkled with a bucket sprinkler.



STRAWBERRIES.

Leaf blight can be prevented by use of the Bordeaux mixture, applied with a spray pump once in two weeks; first application must be made early in the season.

Destroy the crown borer by spraying with Paris green, three ounces to forty gallons of water, as soon as the new leaves open, again just before the first blossoms unfold, and again after August 1st.

TOBACCO.

The tobacco worm, or horn caterpillar, is the chief pest of the tobacco field. The moths appear in June and July, and the female at once lays eggs on the upper surface of the leaves; these hatch in about twenty-four hours, and the worms at once begin to eat. Can be destroyed by spraying with Paris green or London purple, one-fourth pound to fifty gallons of water.

COTTON.

The Arkansas Industrial University at Fayetteville says, the following is one of the most efficient, inexpensive and harmless remedies for the destruction of the cotton worm: Two and one-half pounds pyrethrum, and one and one-half gallons of kerosene oil, and one pound soap; dissolve the latter in one gallon of boiling water, and to this hot mixture add one gallon of the above extract (Pyrethrum and kerosene), and mix thoroughly with a force pump; dilute with water 450 parts to one part of the emulsion, and apply to the cotton with a "Vermorel" nozzle; this extract kills by contact, and though destructive to insect life, is not in the least injurious to those handling it.



CURRENTS AND GOOSEBERRIES.

To destroy the worms spray with powdered white hellebore, one ounce in three gallons of water, as soon as the worms appear. To destroy the yellow aphids, spray with kerosene emulsion early in the season. To prevent mildew use one-half ounce potassium sulphide to one gallon of water



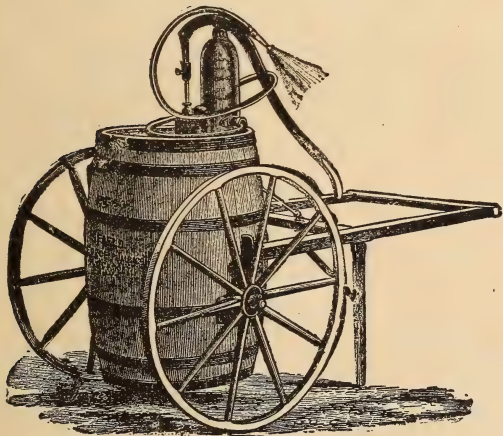
The spray pump can be used for washing buggies with good advantage. After washing the buggy, wipe dry with a chamois skin or soft rag and then apply a little kerosene oil and lampblack with a small sponge.

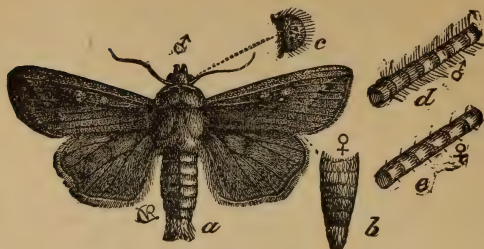
PEARS.

The pear slug can easily be destroyed by spraying with Paris green, four ounces to fifty gallons of water, or kerosene emulsion as soon as it begins operations. Pear-leaf mite can be destroyed by spraying with kerosene emulsion. The codling moth and curculio should be treated the same as recommended for apple trees.

PLUMS.

Destroy the aphid with kerosene emulsion and a fine spray nozzle. The curculio can be destroyed by spraying with three ounces Paris green to forty gallons of water. First applications should be made as soon as blossoms have fallen, and repeat at intervals of a week or ten days. Four applications should be sufficient. Other enemies of the plum will be destroyed by this method, but in all cases be particular to keep the poison and water constantly stirred.

*Spray Pump.*



HOW TO DESTROY ALL KINDS OF HOUSE INSECTS.

1. Insects do not grow by imperceptible increase in size as a bird or a cat. All insects pass through several changes from the egg to the perfect state. The horrid caterpillar that crawls in our path to-day will soon be seen flitting among the flowers in the form of a beautiful butterfly.

2. To destroy house pests successfully, the history of the insect, from the egg to the perfect state, must be well known. The successful housekeeper must always be a close observer and a careful student in order to keep her house free from noxious insects.



How to Avoid Fleas.

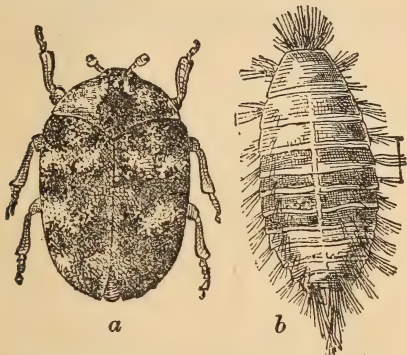
1. There are no human fleas in North America. The dog and the cat flea are the only species that annoy us.

2. The eggs of the flea are very small, white and oblong, and are laid on the dog or cat, and, being sticky, adhere to the hair until they are ready to hatch, when they fall to the ground. They hatch in about a week and in less than two weeks attain their growth. They then pass through a pupal stage, and in

two weeks more the perfect flea appears. They flourish best in sandy soil.

3. REMEDY. Put *olive oil* on the dog or cat or both, as the case may be, and rub it into the hair thoroughly and after a few hours wash out with warm water and soap.

4. Dalmation Insect Powder rubbed into the hair and sprinkled around the dog's kennel or the cat's sleeping place is also a good remedy.



How to Exterminate the Carpet Bug.

The Carpet Bug (*Anthrenus Scrophulanæ*) or Buffalo Bug, as it is sometimes called was first noticed in the city of Buffalo, New York.

The grub which does the damage is about one-fourth of an inch in length. It is covered with hair as shown in the above illustration *a*, *b*. It spins no cocoon like the caterpillar, but when full grown the skin splits on the back and shows the insect. A few weeks later the skin bursts again, and the perfect little bug, as shown in *a*, appears. It is marked with red, black and white spots and is less than one-eighth of an inch in length.

REMEDY. When once in a carpet it is a very difficult insect to destroy. In some houses carpets cannot be used, as they are eaten as fast as they can be put down. Tallowed paper placed around the edges of the carpet is a very good preventive.

When a carpet is cut as if with scissors following the seams in the floor, the simplest and safest remedy is to pour benzine in very small quantities along the seams ; also running a hot flat-iron over along the seams of the carpet is very destructive to both the insect and the eggs. Sprinkling the paper with benzine before the carpet is tacked down is an excellent precaution.



How to Destroy Clothes Moths.

One of the greatest enemies of the housewife is the clothes moth. It is very small and makes its way through the smallest crevices. The female moth finds its way in early summer among the clothes and furs, suitable for food for its young, and there deposits about fifty or more eggs. In about a week the eggs hatch and the young worms begin to eat upon the cloth upon which the eggs were laid. It spins a sort of case which it lengthens and enlarges. Not content with eating and making a house for itself upon the cloth upon which it lives, it cuts its way in various directions through the cloth and drags its case after it. As the weather gets warmer the little worm closes its case at the ends and in three weeks the perfect moth will make its appearance.

REMEDY. Beat the garments well early in the spring and occasionally during the summer. It is better to keep the articles in a large paper bag. Occasional airing is good.

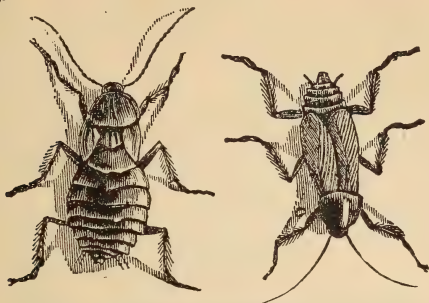
For clothes packed in boxes or trunks, put a little oil of cedar on a piece of paper and roll up and wrap with other paper to avoid soiling the garments, and put several of these rolls into each box or trunk. Carbolic acid, turpentine or benzine is equally good, used in the same manner.

Black pepper, a piece of camphor gum, or a handful of snuff wrapped up with the clothes is excellent.

Caution. Camphor should never be used in keeping seal skin, as it takes the color out of the fur.

A close closet lined with tar paper is the best for furs. It is also excellent for clothes.

Whole cloves are now used to exterminate moths, and some say they are much better than tobacco, camphor, or cedar shavings.



How to Destroy Cockroaches (Blattidæ).

HISTORY. The Cockroach does not, like most insects, pass through several distinct changes. It sheds its skin several times and develops into a full-grown insect. The female carries her eggs with her in a little sack. When the eggs are ready to hatch the case is dropped. The young are white after being hatched and change to a dark brown color. They shed off five or six times before maturity.

Cockroaches are very troublesome, eating everything that comes in their way. They have a strong and disagreeable odor.

Another species of the cockroach known as the "Water bug" is very common in New England. Its habits and manner of development are about the same as the regular cockroach.

REMEDY. Thirty-seven parts of borax, nine parts of starch, and four parts of cocoa sprinkled around the haunts will usually exterminate them in a few days.

Other receipts, such as a tablespoonful of red lead and indian meal mixed with enough molasses to make a thick batter used for a few evenings, will also produce fatal results.

Insect powder does not kill them, but stupefies them so they can be swept up and destroyed.

Pouring hot water on them, where it can be done, is a sure remedy.



How to Get Rid and Keep Rid of Bedbugs.

1. The eggs of the bed-bug are white in color and oval in shape. The young resemble the parents, and it takes about eleven weeks to get its full growth. Like reptiles, they can live many years without food. Mr. Goeze, of Germany, has kept them six years in a bottle *without* a particle of nourishment of any kind.

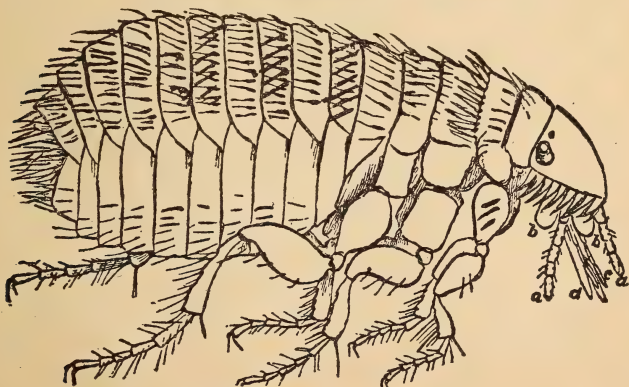
2. Keep the bedding and bedstead perfectly clean is the best preventive.

3. REMEDY. Pour hot water into the crevices and then apply benzine to the different parts of the bedstead.

4. Unpurified petroleum mixed with a little water is also a sure remedy. Corrosive sublimate is a very good, but a very poisonous cure.



A MOTH.



A FLEA—Magnified.



How to Exterminate Spiders.

Take a small common kerosene lamp and light it, and late in the afternoon or early in the evening look over the corners and places where spiders are commonly found, and when one is seen hold the lamp chimney directly beneath it, and it will fall at once into the chimney and be instantly destroyed. It is not difficult in this way to destroy all the spiders in the house in a few evenings. It avoids killing them by sweeping them down, and staining the walls or carpet. Early in the evening is the best time.

How to Preserve Books from Book Moths.

The little Bristle Tail or Silver Fish has a little long, slender body covered with a delicate silver scale; it has no wings and passes through no changes. It feeds on the paste of the binding of books, devours leaves, eats off the labels in Museums and is generally destructive to both books and papers.

Books are also eaten by the larva of a little bug that produces a ticking sound like a watch — It is called the “Death Watch,” as it is usually heard in the night ticking like a watch.

REMEDY. A little rag saturated with benzine or carbolic acid placed along the back of the shelves will clear the library of all insects. Insect Powder sprinkled over the books will destroy the little “Silver Fish” insect instantly.

Mixture for Destroying Flies.

1 pint infusion of quassia,
4 ounces brown sugar,
2 ounces ground pepper.

To be well mixed together, and put in small, shallow dishes when required.

How to Keep Out Mosquitoes.

If a bottle of the oil of pennyroyal is left uncorked in a room at night, not a mosquito, or any other blood-sucker, will be found there in the morning.

A Domestic Remedy for Destroying Flies.

$\frac{1}{2}$ tablespoonful black pepper, in powder,
1 teaspoonful brown sugar,
1 tablespoonful cream.

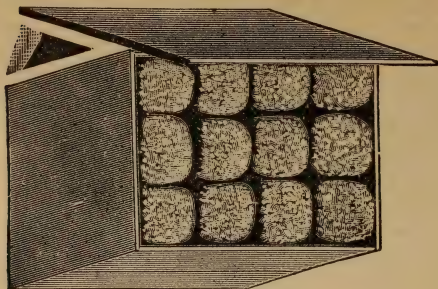
Mix them well together, and place them in the room on a plate, where the flies are troublesome, and they will soon disappear.



A CURE FOR BEE AND WASP STINGS, SPIDER BITES, Etc.

1. The cure for insect stings is very simple. Scientists have found that the poison injected by the insect is an acid, and hence any alkali is an excellent remedy.

2. REMEDY. Apply ammonia or common soda and water. If there is much inflammation and redness, apply a solution of borax and warm water. Apply with a rag saturated with the solution.



A BOX OF SPONGES.

A NEW WAY OF TRAPPING ANTS.

1. Ants are very difficult pests to expel from the house. There have been many receipts and experiments tried, but without any satisfactory results.

2. The ants that infest our houses live only in rotten wood, either in the decayed sills of the house or in rotten timbers and old fences near by. It is best to remove all such hiding places if possible.

3. REMEDY. Ants are very fond of sugar, and anything containing it will attract them. Sweeten a pan of water to a thin syrup, and then dip a large sponge into it, and wring it out. Place the sponge where the ants can get at it; it will soon be filled through and through with ants, then take it up carefully and plunge it into boiling water, and again set it by saturating it with the thin syrup. A few days' trial will, for a long time, exterminate the annoying pests.

This is the only successful experiment ever tried.

4. A trap more simple but not so effectual is a plate covered with a thin layer of lard and placed where the ants can easily get at it. This trap is more to destroy the little yellow ant than the larger species.

How to Destroy Ants on the Lawn.

Boiling water, kerosene, or a solution of fresh insect powder in water, poured into the hill, will destroy the inhabitants at once. Where the nests are outside of the house this is a sure remedy.



ANTS COMING HOME WITH CAPTIVES.

How to Destroy Garden Insects.

THE CUT WORM.—A great enemy of garden plants is the larva of the dark colored miller or moth that enters our dwellings in the evening when the lamps are first lighted. This worm will cut off the plant close to the ground. It is usually done at night and the next morning the grub can be found just beneath the surface and easily destroyed.

REMEDY. Place a lighted lamp or torch in the garden in the early part of the evening and a pan of water well whitened with milk near by, and many of the moths will fall victims.



THE SCREW WORM.

Its Ravages on Horses, Cattle, Sheep,
Hogs, Etc.

Description and Cure.

The mature insect is a fly (Fig. 2.) a little larger than a common house fly, and lays its eggs in wounds, sores, and in the natural openings of man and animals. Young calves are almost invariably affected in the navel and frequently in the mouth, causing the teeth to fall out. Young colts are often affected in the same way. Barb wire injuries to horses and cattle are the most common sores in which the screw worm

is found. Hogs are very liable to become affected by castration or other wounds.

HISTORY. After the egg is laid it becomes a small maggot, which soon burrows itself in the flesh of the wound. The maggot grows steadily in size and eats more and more every day of the soft flesh around the wound or sore. The worm is full grown in about a week. They then leave the sore and fall to the ground, and in about 12 days become flies.

Symptoms.—A swollen, gaping condition of the wound, and the constant discharge of blood. While the sore is unhealed new eggs are constantly being laid, and if the worms are not destroyed, they eat deeper and deeper and often kill the animal.

REMEDY. Cresylic ointment, calomel, chloroform or a little carbolic acid in water. In some cases bandages are useful. In others the sores can be filled with oakum and a few stitches taken. All treatment should be supplemented by daubing the margins of wound with pine tar to ward off the fly.



A Remedy for the Harvest Mite, commonly known as Chiggers or Jiggers.

1. These little mites cause about the same irritation of the skin as the itch mite, and are only found in the southern half of the United States and Mexico.

2. They get on the lower limbs and work their way upward on the body. They cut and dig their way into the skin, causing great irritation and annoyance, sometimes swelling and inflammation.

3. **REMEDY.** Mix equal parts of powdered sulphur and fresh lard, and apply as often as necessary. Also kerosene oil will destroy the insects and allay inflammation.



How to Destroy Cabbage Worms.

The cabbage worm has been very troublesome of late years, but is easily got rid of. Our plan is to go over the patch in the morning and sift a little fresh Persian insect powder over the heads while the dew is on. This will kill every worm it touches in less than five minutes and it is but a short job to treat five hundred heads if a common pepper-box, such as ground pepper comes in, is used to hold the powder. One shake on a calm morning before the breeze starts up is sufficient for a head, and it can be done almost at a walk. This operation should be repeated at least once a week as long as the millers are seen flying around. The insect powder is entirely harmless and is only poisonous to insect life.

Hot Water.—Hot water is also an excellent remedy. Apply at about 150° Fahr. No injury to the cabbage will result.

How to Exterminate the Strawberry Worm.

Mow the strawberry plants close to the ground while the worm is among the leaves. Let them dry a short time and pile them up with a little straw and burn them. It is also recommended to burn them right over the roots of the plants. This can be done without much injury to the strawberry plants.

How to Kill the Plum Weevil.

1. Pick up carefully every day all the withered plums that fall prematurely from the trees and burn them.

2. Pasture hogs in a plum orchard and the results are generally very good. No other remedy has ever been successfully tried.



How to Kill the Orchard Caterpillar.

The Appletree Caterpillar during the month of May forms large cobweb-like nests in the forks of the limbs of the apple and cherry trees.

REMEDY. Take a long pole and tie a large rag in the shape of a ball on the end of it; then saturate the rag with kerosene oil and light it and hold it, for a second only, under the nest. It destroys the nest and worms at once. It takes but a short time to go over the orchard, and it saves the fruit as well as the life of the trees. The same remedy will apply to other trees, such as walnut, etc.



How to Kill the Worms on Rose Bushes.

Take a pail of water and stir in a tablespoonful of helibore and sprinkle the bushes thoroughly. One application will generally be sufficient.



How to Destroy Currant and Gooseberry Worms.

Take a tablespoonful of hellebore and stir it into a pail of water, and apply to the bushes with a sprinkler. One or two applications will generally be sufficient. A little care in watching the bushes is necessary. The worms generally begin at the bottom, and are not noticed until the bush is nearly destroyed.

HOW TO DESTROY PLANT-LICE.

There is scarcely a tree, bush or herb that grows in our gardens or fields, that is not infested with some species of plant-lice. Their manner of living, and of reproduction, have attracted much interest. They both deposit their eggs and bring forth their young alive, a peculiarity which does not take place in any of our fourwinged insects. Their multiplication is immense, and were it not for their numerous enemies, all our vegetable products would be consumed as fast as they grow.

REMEDY. When the plant-lice get too numerous take a little flower of sulphur, and mix it with a little sawdust, and scatter it over the plants.

A New Way to Protect Cucumbers, Melons, and Squash Vines.

1. The worst enemy of these vines is the little striped yellow bug. It first appears as a little tiny worm, and in almost two weeks casts off its skin and acquires its perfect form.

2. REMEDY. The best way to raise vines which these insects feed upon, is to get eight-inch tile, cut them in two in the middle, or have it done at the tile factory, and set into the earth several inches, plant the seeds inside the tile and keep it covered with a window glass until the vines are beyond the reach of the bugs. The glass draws the heat and makes the growth thrifty and rapid.

3. The Ohio Experiment Station recommends the following : Take the refuse of a cigar factory, dry it and powder it, and apply a shovelful of the powder to each hill ; after each rain renew the application. The results are excellent.

4. Tobacco acts both as a mulch and fertilizer, and is an excellent thing for cucumbers and melons, aside from its beneficial effects in keeping off the cucumber beetle.

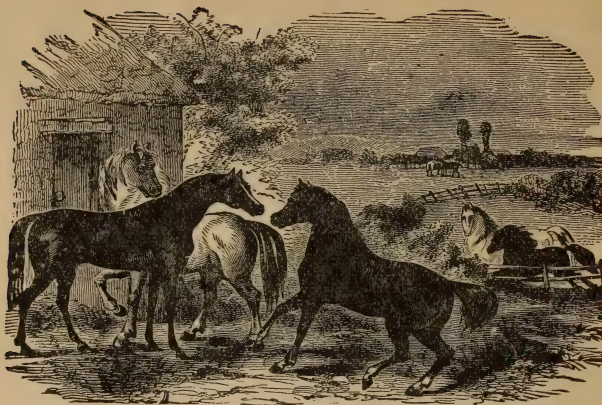
Another Method.

Place over each hill a thin piece of cheese-cloth about two feet square, and fasten the edges down by loose earth. A little twig may be bent in the form of a curve and stuck into the ground to keep the cloth from the plants, though this is not necessary.

1. THE LARGE SQUASH BUG. They have a strong odor like a bed-bug. It is a terrible enemy to the squash and pumpkin vines. The only remedy is to tear off the part of the leaf where the young cluster, and crush them under foot, and to catch the old ones and destroy them. Application of hot water 150 degrees (Far.) will destroy them.

HOW TO PUT OUT GASOLINE FIRE.

Gasoline can be quickly and effectually put out by sprinkling with common wheat flour. Water should never be used, it spreads the oil and fire, increasing the danger, while flour absorbs and smothers like magic.



THE NOBLE HORSE.

To man, whether as a civilized being or as a barbarian, no animal is more useful than the horse. The beauty, grace, and dignity of this noble creature, when in a properly developed state, are as marked as his utility. As an intelligent animal, he ranks next in scale to the dog, that other companion and friend of man. Taking into consideration, then, his usefulness, his attractive appearance, and his intelligence, what is known of his history cannot prove unacceptable.

Buyer's Receipt.

The buyer in the purchase of a horse should always demand the following receipt:

\$200.00.

Albany, N. Y., June 30, 1894.

Received of Frederick D. Hull, Two Hundred Dollars, for a black mare, warranted only six years old, sound, free from vice and quiet to ride and drive.

Frederick D. Nichols.



NANCY HANKS—THE QUEEN OF THE TURF.

A COMPLETE TREATISE ON THE HORSE.

HOW TO TRAIN, BREAK, AND DOCTOR HORSES;

—ALSO—

How to Doctor Cattle, Sheep,
Hogs, Poultry and Dogs.

—BY—

THE BEST KNOWN AUTHORITIES.

1. Every one should remember that a horse cannot understand all language or words of command, except so far as he is taught to associate them with actions, consequently a horse cannot know what to do until he is taught.

If a man were to sit on a block and simply read the word "whoa" to a horse, he might do it indefinitely without teaching him its meaning;

but if a horse were moved, set in moderate motion, and immediately after command the reins were pulled, he would soon be taught to stop. The same performance is necessary in teaching a horse to back. For the same reason the team on a street car starts and stops at the sound of the bell; it is because they have become accustomed to being started and stopped at that time.

2. VICIOUSNESS.—To a certain extent some horses are vicious, but the fault is not so much in the horses as in the fact that they have not been properly handled, or carefully trained.

Many bad dispositions in horses have been brought on by the bad disposition of those who had them in charge. Some horses are dull, while others are intelligent; some are



A Stubborn and Mulish Horse.



A Vicious Horse.

more easily frightened than others, consequently great care and judgment should always be exercised in training the horse. For good training largely makes the horse.



Fig. 3. An Excitable Horse.

Fig. 4 represents a very intelligent horse, kind and quiet to ride and drive; yet possessing a full degree of spirit. He is a horse that can be trained to be a favorite, and will always appreciate good care.

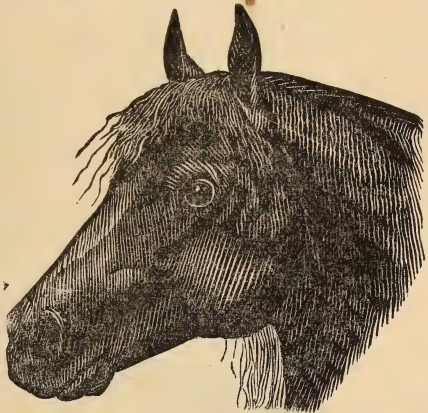


Fig. 4. An Intelligent Horse.

INTELLIGENCE.—There is just as much difference in intelligence of a horse as there is difference in men. Some horses can be taught most anything, while others are apparently without any faculty of intelligence.



Fig. 5. A High Strung Horse.

The horse in fig. 5 requires a gentle but strong hand in order to get the best possible results. He is high strung and nervous and will never under any circumstances bear the use of the whip. He will go until he falls in his tracks.

Fig. 6 represents one of those indifferent specimens of horses, heavy, dull and stupid. He can be driven, but his gait makes it an annoyance rather than a pleasure, for it is almost an impossibility to get him to go faster than a walk. He is a horse that tries the patience of a saint, when behind time for a train.



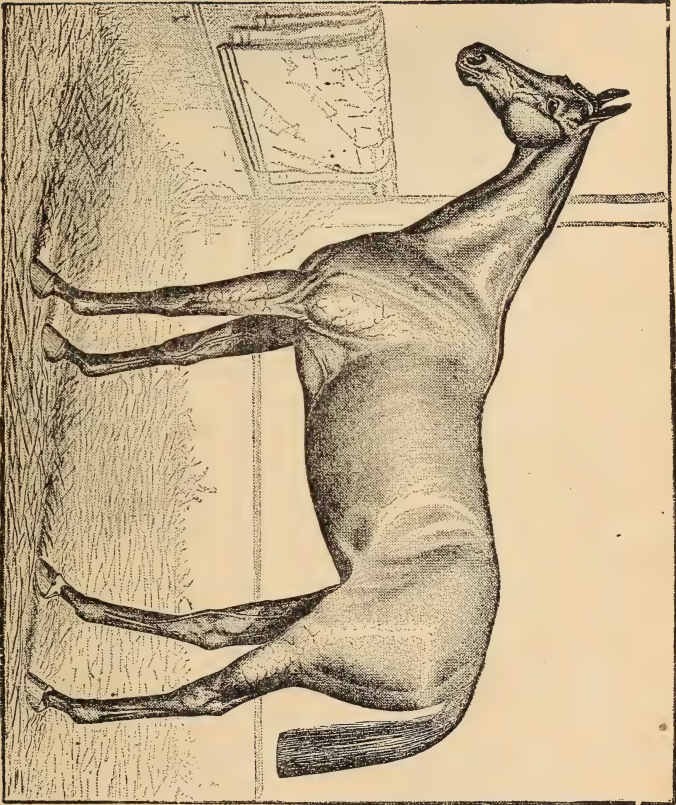
Fig. 6. A Dull and Stupid Horse.



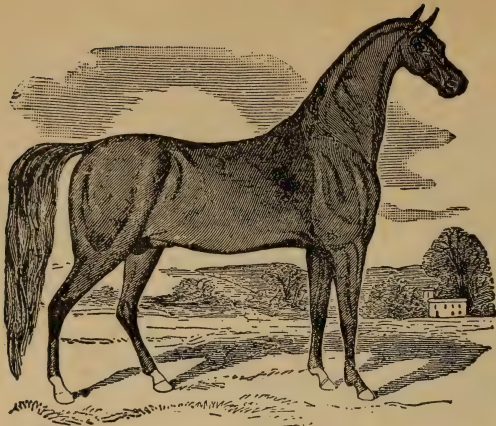
Fig. 7. A Nervous Horse.

Fig. 7 represents a horse that is difficult to manage. He is not vicious, but very nervous and excitable, and when properly handled will become subdued and kind, but unless properly trained he is liable to kick with his hind feet and strike

with his forward feet, and will bite if an opportunity is offered. He is what may be called an untrustworthy horse, but the law of kindness will subdue him, but when in the harness proper vigilance must always be taken.



MISS WOODFORD.



How to Tell a Good Horse, and Practical Rules for Purchasing.

1. *In a good horse the ears must be small and pointed and wide between. The eye must be large and full and stand out prominently.*

2. *An intelligent horse must have considerable width between the eyes. The nostrils must be large and thin, neck long and tapering, with stout heavy muscles on the top and thin through the middle.*

3. *A good horse must always have a short back, broad and long hips, and close jointed. A good traveler must have proper proportions, namely: the withers should be exactly midway between his ears and the coupling of the hip. From the point of the withers to the shoulder should be just as long as from the coupling over the kidneys to the point of the hip by the tail.*

4. *A horse which has thick ears; small, flat, sunken eyes; small, thick nostrils, and is narrow between the eyes and ears, with a thick, clumsy neck or a curved nose, is a horse that is liable to be vicious, clumsy, awkward or balky, and never can be taught anything.*

5. *The first thing for the purchaser to observe are the eyes.*

6. *If the eyes are clear and full and brilliant, the horse possesses good sight, but when the eyes are flat or sunken and have a dead and lifeless look the horse will probably lose his sight in the course of a few years.*

7. *The iris or circle that surrounds the sight of good eyes should be distinct and of a pale cinnamon color.*

8. *The teeth should be sound, and as to age, see TEETH in the other part of the book.*

9. *The feet should be smooth and tough, of a middle size, without wrinkles; the frogs horny and dry.*

10. *A good horse for traveling or service must be wide across the chest.*

11. *The back should be straight or have only a moderate sinking below the withers. The ribs should be large, flanks smooth and full. A horse for strength and durability should have considerable width across the hips.*

12. *A broken-winded horse pinches in his flanks, with a very slow motion, and drops them suddenly. A horse with the heaves can be easily detected by noticing the movement of the abdomen in breathing. Always have the horse travel by walking, trotting and running, to see that there is no lameness.*

13. *A horse that travels with his feet very low is very apt to be a stumbler. See that the horse lifts his feet well in taking a step. To remedy the difficulty of stumbling put on heavy shoes, it will make the horse lift his feet higher. See that the horse is gentle by placing your hand on different parts of the body.*

14. *Remember that he who buys a horse needs a hundred eyes.*



How to Breed and Care for Horses.

1. If a horse shows signs of blind-staggers or megrims, give it doses of epsom salts and bran mashes and exercise.
2. Castor oil rubbed on warts will often cause them to disappear.
3. Do not breed unsound mares. The colts will not pay.
4. Don't put a tight check on the horse. It is not a thing of beauty, but of cruelty.
5. If you think it is a trotter, sell it at the first good offer.
6. A fretting mare will produce a fretting colt.
7. Disposition is a great deal in breeding animals.
8. The farmer with only one team should have the colts come in the autumn.
9. Linseed meal acts as a digester. It is an excellent food to open the pores, hence a good spring food.
10. If the horse bloats and has colic it is a sure sign of indigestion. A very little magnesia and a little salt mixed with its grain, would help to correct the flatulency.
11. A horse will not eat out of a sour trough.
12. Do not think of using a common stallion because he is cheap. His get will be cheap to sell and dear to rear.
13. Carrots and bran mashes will help the mother when the little foal comes.
14. Feed the horse which is inclined to the heaves very little hay, and always wet this, and wet the grain. If the case is bad, cut the hay and mix it wet with the grain. The heavy horse should never be fed more than five or six pounds of hay a day. A half pint of raw linseed meal put into the feed, if the horse will eat it, will do it good.
15. A horse should be thoroughly groomed every day. It improves the health as well as the looks.



How to Tell the Age of a Horse.

The only way to determine a horse's age is by the appearance of the teeth. They undergo certain changes, which any careful observer will easily notice.

A horse has 40 teeth—24 grinders, 12 front teeth and 4 tusks. A mare has 36 teeth—24 grinders, 12 front teeth and sometimes tusks, but not often.

1. Eight to fourteen days after birth, the first middle nippers of the set of milk teeth are cut (Fig. 1), four to six weeks afterwards the pair next to them (Fig. 2), and finally, after six or eight months, the last (Fig. 3).

2. All these milk teeth have a well defined body and neck, and a slender fang, and on their front surface grooves of furrows, which disappear from the middle nippers at the end of one year, from the next pair in two years, and from the incisive teeth (cutters) in three years.

3. At the age of two the nippers become loose and fall out, in their places appear two permanent teeth, with deep, black cavities, and full, sharp edges (Fig. 4).

4. At the age of three, the next pair (Fig. 5) fall out.

5. At four years old, the corner teeth fall out (Fig. 6).

6. At five years old, the horse has his permanent set of teeth.

7. The teeth grow in length as the horse advances in years, but at the same time his teeth are worn away by use about one-twelfth of an inch every year, so that the black cavities of the center nippers below disappear in the sixth year (Fig. 7), those of the next pair in the seventh year (Fig. 8), and those of the corner teeth in the eighth year (Fig. 9). Also the outer corner teeth of upper and lower jaw just meet at eight years of age.

8. At nine years old, cups leave the two center nippers above, and each of the two upper corner teeth has a little sharp protrusion at the extreme outer corner (Fig. 10).

9. At the age of ten, the cups disappear from the adjoining teeth.

10. At the age of eleven, the cups disappear from the corner teeth above, and are only indicated by brownish spots.

11. The oval spots become broader, and changes, from the twelfth to the sixteenth year, more and more into a triangular form, and the teeth lose, finally, with the twentieth year, all regularity.

12. The tusks, or canine teeth, conical in shape, with a sharp point, and curved, are cut between the third and fourth years, their points become more and more rounded until the ninth year, and after that, more and more dull in the course of years, and lose, finally, all regular shape. Mares have, frequently, no tusks, or only very faintly indicated ones.

How to Enliven an Old Horse.

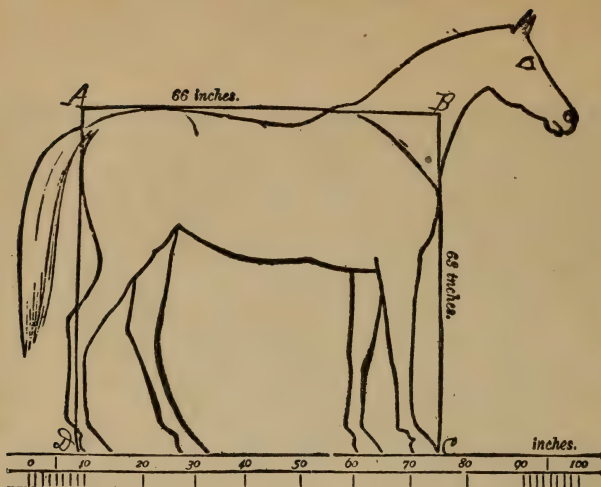
- 1 ounce oil of cloves,
- 2 ounces oil of sassafras,
- 1 ounce oil of wintergreen,
- 1 ounce tincture cantharides,
- 5 ounces of alcohol,
- 3 ounces tincture of asafoetida.

Mix well, and give twelve drops daily in a pail of water.

WALTER E.

The
greatest

WALTER E.—Bay Gelding. 2:10 Trotting.



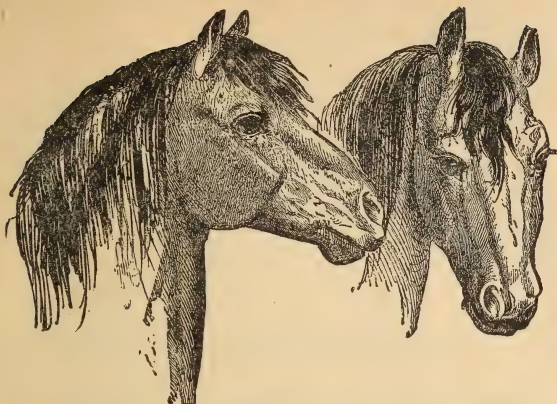
HOW TO PICK OUT A TROTTER HORSE.

Horses for speed must conform to the following proportions. No noted trotter has ever varied to any extent from the following figures :

	INCHES.
Height at withers and croup.....	63
Length from shoulder-point to quarter.....	66
From the lowest part of the chest to the ground.....	36
From the elbow-point to the ground.....	39
From the withers to the pole, just behind the ears, <i>in a straight line</i>	30
The same measured along the crest.....	32
Length of head.....	22
Width across the forehead.....	9½
From the withers to the hip.....	22
From the stifle to the point of the hock, in the attitude shown in the plan.	28
From the root of tail to stifle-joint.....	26
From the point of the hock to the ground.....	22½

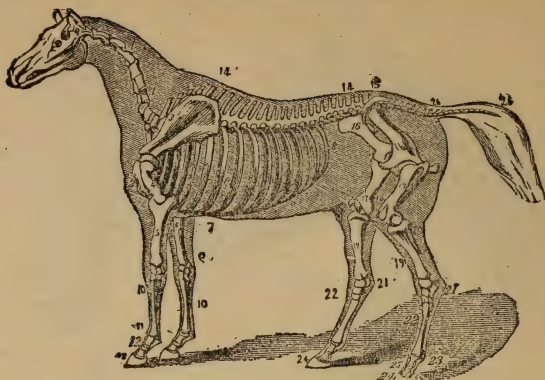
Girth varies from 76 to 80.

Circumference of arm just below the elbow, 16½ to 18 inches.



**Practical Rules on Keeping, Feeding, Doctoring
and Training Horses.**

- 1. Young horses as well as old should be sheltered every night during the winter months.*
- 2. Never allow horses to become poor for want of grain and hay.*
- 3. Never grain horses highly, unless they work accordingly.*
- 4. Always feed good hay, there is but little nourishment in poor hay.*
- 5. Never drive or work a horse when he refuses his feed.*
- 6. Chopped hay, moistened and salted, is the best way to feed hay.*
- 7. Ground feed is the most profitable way to feed grain.*
- 8. The natural pulse of the horse is from 36 to 40 per minute.*
- 9. More diseases in horses come from short check reins than from all other causes.*
- 10. Never feed or water horses when warm.*
- 11. Horses should be exercised every day.*
- 12. Never strike a horse on the head, and you will find him much more easily handled.*
- 13. Never feed a horse damaged grain.*
- 14. A horse should be groomed once a day.*
- 15. Old horses should be fed on chaff instead of hay.*



Skeleton of the Horse as Covered by the Muscles.

1. 1. The seven cervical vertebrae, or bones of the neck. 2. The sternum, or breastbone. 3. The scapula, or shoulder-blade. 4. The humerus, or bone of the arm. 5. 5. The radius, or bone of the forearm. 6. The ulna, or elbow. 7. The cartilages of the ribs. 8. 8. 8. The costae, or ribs. 9. The carpus, or seven bones. 10. 10. The metacarpal, or shank-bones; the larger metacarpal, or cannon, or shank-bone, in front; and the small metacarpal, or splint-bone, behind. 11. The upper pastern. 12. The lower pastern. 13. The coffin-bone. 14 to 14. The eighteen dorsal vertebrae, or bones of the spine. 15. The six lumbar vertebrae, or bones of the loins. 16. 16. The haunch, consisting of the ilium, the ischium, and the pubis. 17. 17. The femur, or thigh-bone. 18. 18. The stifle-joint, with the patella, or knee-cap. 19. 19. The tibia, or proper leg-bone. 20. The fibula. 21. 21. The tarsus, or hock. 22. The metatarsal bones of the hind-leg. 23. 23. The pastern of the hind-feet, including the upper and larger bone.

SIGNS FOR THE DIFFERENT DISEASES OF THE HORSE.

1. As the horse has no way of communicating to us his pains or distress, we must find out the difficulty by the symptoms.

2. The pulse in a healthy horse beats from 36 to 40 times per minute, and any variation from this number will indicate excitement, disease, or suffering of some kind.

3. In fever the pulse will run from 45 to 75 per minute. If the horse becomes very weak the pulse will flutter and vary.

4. A horse generally refuses food, when sick.



FEELING OF THE PULSE.



LISTENING TO THE BREATHING.

5. In colds, catarrh or glanders the eyes water and just before death become glassy.

6. The natural color of the inside of the nose is a light pink. In fever or inflammation of any of the internal organs it becomes red.

7. Cold ears indicates inflammation of the lungs, pleurisy or colic.

8. Heavy breathing indicates inflammation of lungs. Rapid breathing, fever. Deep snoring breathing, brain disease.

9. Cold feet indicate inflammation of the lungs, bowels, bladder, etc.

10. Dry hair, standing straight out, indicates indigestion, glanders, worms, skin disease, the condition of being hide-bound, and consumption.

11. A hot skin indicates local inflammation or the presence of fever.

12. If the manure is very offensive, it indicates indigestion. If the balls are shiny, it indicates glanders or worms.

13. A stoppage of the urine, or the passage of only a small quantity at a time, attended by great straining, indicates inflammation of the bladder or kidneys. A great quantity of water indicates diabetes.

14. If the horse lies down carefully and rolls, he is suffering from *flatulent colic*. If he drops down quickly and rolls over rapidly several times, it is *spasmodic colic*. In inflammation of

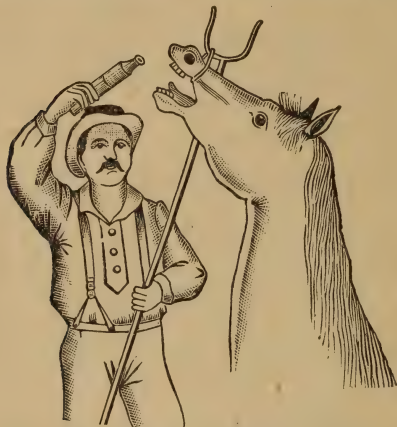
the bowels he lies down carefully, and remains stretched out and paws and strikes.

15. If a horse stands still like a statue, it is a symptom of the lock-jaw.

16. Stiffness in the walk may indicate rheumatism, founder, corns, or some other local difficulty in the legs or joints.

17. If a horse does not sweat, or the sweat dries up suddenly, sunstroke or some serious inflammation is the cause.

18. If a horse stands straddling, or walks in that way, a lame back or some kidney or bladder disease is the cause.



HOW TO GIVE A HORSE MEDICINE.

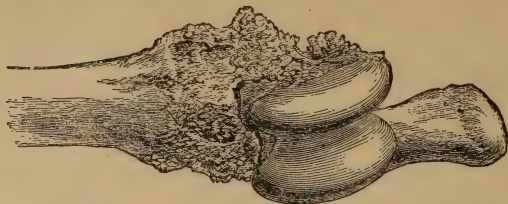
1. The old practice of drawing the head of a horse by the halter over a beam or pole to administer medicine is as cruel as it is absurd.

2. The lower jaw of the horse while taking medicine should remain perfectly free, as shown in the above illustration.

3. METHOD. — Take a forked stick or a common pitchfork, and run it through a small strap fastened to the upper jaw of the horse. No strangling nor struggling will take place. Neither man nor beast can drink unless the lower jaw is free to move.

HOW MUCH MEDICINE TO GIVE AT ONE DOSE. 437

NAME OF DRUG.	USE AND EFFECT.	HORSES.	CATTLE.	SHEEP.
Cream of Tartar.	Increases the quantity of Urine.	2 oz.	3 oz.	1 oz.
Dandelion Extract.	Laxative. Increases the Flow of Urine.	1½ oz.	2 oz.	3 drs.
Ergot.	Checks Bleeding. Contracts the Womb.	¾ oz.	1 oz.	1 dr.
Ether.	Stimulant.	1 to 2 oz.	2½ oz.	½ oz.
Fennel Seed.	Improves Digestion.	1 oz.	1½ oz.	3 drs.
Galls, Oak.	Astringent.	5 drs.	1 oz.	1 scruple.
Ginger.	Stimulant, Stomachic.	1 oz.	2 oz.	½ oz.
Hemp.	{ Narcotic.			
Indian Extract of... ..	{ Induces Sleep.	½ dr.	.....	12 grains.
Iodine.	Alterative. Dispers Enlargements.	15 grs.	20 grains.	8 grs.
Iron Sulphate.	{ Tonic. (Never to be given during preg- nancy, as it may produce abortion.)	3 drs.	.....	1 dr.
Lime Water.	Antacid, Astringent.	5 oz.	6 oz.	3 drs.
Lime Chalk.	Antacid, Astringent.	1 to 2 oz.	2 to 3 oz.	1 oz.
Linseed Oil.	Laxative.	1 to 2 pts.	2 pts.	½ pt.
Lobelia.	Sedative. Used for Emetics.	2 drs.	3 drs.	15 grs.
Magnesia.	Laxative, Antidote to Arsenic.	2 oz.	3 oz.	1 oz.
Myrrh.	Stimulant, Tonic.	3 drs.	5 drs.	2 drs.
Nitre, Sweet spirits of	{ Producing Urine. { Stimulant.	1 to 2 oz.	3 oz.	5 drs.
Oak Bark.	Astringent.	1 oz.	3 oz.	4 drs.
Olive Oil.	Laxative.	1 to 2 pts.	2 pts.	5 oz.
Opium, Tincture of.	Narcotic Sedative.	1 to 2 drs.	3 drs.	15 grs.
Peppermint, Oil.	Aids digestion. Anti-spasmodic.	20 drops.	20 drops.	8 drops.
Aconite, Tincture of	For Fever. A Sedative.	25 drops.	35 drops.	4 drops.
Alum.	Astringent.	2 drs.	3 drs.	1 drachm.
Aloes.	Purgative and Tonic.	5 drs.	4 drs.	.....
Aqua Ammonia.	Stimulant. Anti-spasmodic.	½ oz.	1 oz.	½ dra.
Arsenic.	Nerve Tonic. Good for Paralysis, Mange, etc.	5 grains.	6 grains.	1 grain.
Assafoetida.	Stimulant, Vermifuge.	2 drs.	3 dr.	1 dr.
Anise Seed.	Stomachic, Carminative.	1 oz.	1½ oz.	3 drs.
Arnica Tincture.	Stimulant, Diuretic.	1 dr.	1 dr.	1 scruple.
Bicarbonate of Pot- ash.	Diuretic. Used for Rheumatism.	6 grs.	7 grains.	1 gr.
Borax.	Uterine Stimulant.	5 drs.	1 oz.	1 dr.
Bismuth Subni- trate.	{ Use for Irritation of Stomach and { Bowels.	2 drs.	3 drs.	20 grs.
Blackberry Root.	Astringent.	4 drs.	½ oz.	2 scruples.
Boneset.	Stimulant and Tonic.	1 oz.	1 oz.	3 drs.
Blue Vitriol.	Promotes the Secretions.	½ dr.	½ dr.	.....
Calomel.	Purgative for Chronic Diarrhea.	1 dr.	1½ dr.	.....
Camphor.	Anti-spasmodic.	2 drs.	3 drs.	1 scruple.
Caraway Seed.	Improves Digestion.	1 oz.	2 oz.	3 drs.
Castor Oil.	Purgative.	1 pt.	1½ pt.	4 oz.
Carbolic Acid.	Sedative Astringent.	1 dr.	1 dr.	10 drops.
Chloroform.	Stimulant.	1½ drs.	.....	1 scruple.
Cinnamon.	Improves Digestion.	5 drs.	1 oz.	2 drs.
Croton Oil.	Powerful Purgative.	10 to 15 drops	20 drops.	5 to 8 drops
Pepper, Black.	Stimulant, Stomachic.	2 dr.	3 drs.	1½ scrup.
Pomegranate. Root Bark.	Vermifuge.	1 oz.	1½ oz.	2½ drs.
Prussic Acid.	Sedative Anti-spasmodic.	25 drops.	30 drops.	7 drops.
Pumpkin Seeds.	Vermifuge, Increases the flow of Urine. Give as			
Rhubarb.	Laxative, Tonic.	1 oz.	1½ oz.	1 dr.
Resin.	Increases the Secretion of Urine.	5 drs.	1 oz.	2 to 4 drs.
Spanish Fly.	Stimulant Diuretic.	5 grs.	7 grains.	1½ grs.
Sulphur.	Laxative.	3½ ozs.	5 oz.	2 oz.
Tobacco.	Sedative Vermifuge.	4 drs.	5 drs.	1 dr.
Tar.	Expectorant, Anti-septic.	1 oz.	1½ oz.	½ oz.
Turpentine.	Stimulant, diuretic. Anti-spasmodic.	1½ oz.	2 oz.	2 drs.
Wild Cherry.	Expectorant.	1 oz.	1½ oz.	3 drs.



How to Cure Bone Spavin.

1. *Bone Spavin* is an inflammation and deposit or growth of bone on the inner part of the hock-joint. Lameness and soreness are the consequences of this abnormal growth.

2. *Home Treatment.* Give the horse plenty of rest, and apply hot water and vinegar, and give the horse plenty of bran and flax-seed. For later stages of the disease blistering may be helpful. A hot iron is perhaps more efficient.

A LINIMENT FOR BLOOD SPAVIN, WIND-GALLS, ETC.

(HORSE LINIMENT.)

Alcohol, 8 ounces,
Tincture cantharides, 2 ounces,
Oil wormwood, 2 ounces,
Oil stone, 2 ounces,
Turpentine, 2 ounces,
Oil hemlock, 2 ounces,
Iodide potassium, 4 drachms.

Shake thoroughly before using, and apply once a day for one week. Then grease the parts for one week, and then apply again as before until cured.

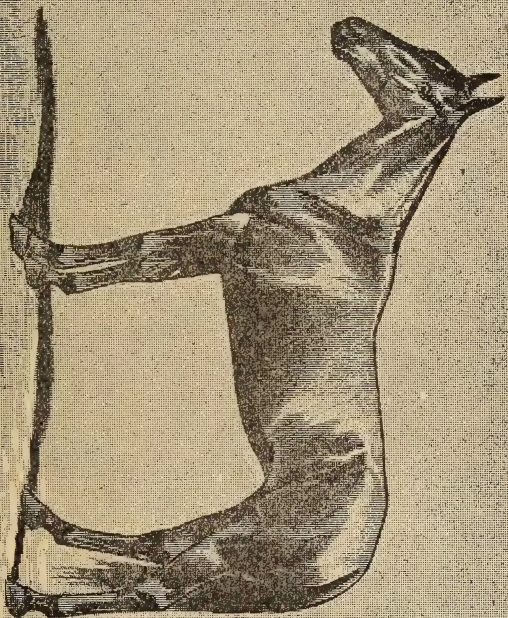
BONE LINIMENT.

(MAN OR BEAST,)

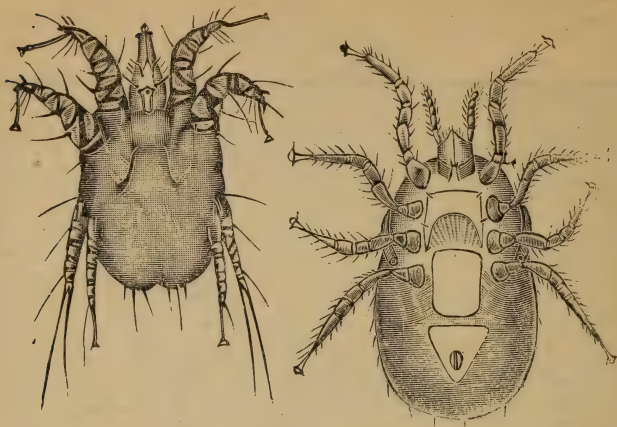
Tincture of camphor, 2 ounces,
Tincture of capsicum, 2 ounces,
Tincture of myrrh, 1 ounce,
Oil spike, 1 ounce,
Spirits of turpentine, 1 ounce,
British oil, 1 ounce,
Oil origanum, 1 ounce,

Shake thoroughly before using. This is an excellent remedy for bruises, sprains, swollen joints, or lameness of any kind.

HARRIETTA



HARRIETTA.—2:09¾ Trotting.



How to Destroy Mites That Infest the Horse.

1. These little mites as shown in the above illustration are greatly magnified so as to show their form. They are animal parasites that burrow in the skin and under favorable conditions they can be transmitted to the mule or even to man, and may live indefinitely on the human skin. It can only be detected by a strong magnifying glass moving among the scurf or scab on the infected skin.

The mite burrows little galleries in and beneath the scurf of the skin, where it hides and lays its eggs and where its young are hatched. The mite is wonderfully prolific, a new generation of fifteen individuals being possible every fifteen days, so that in three months the offspring of a single pair may produce a generation of 1,500,000 mites.

2. Chicken lice often infest the skin of the horse.

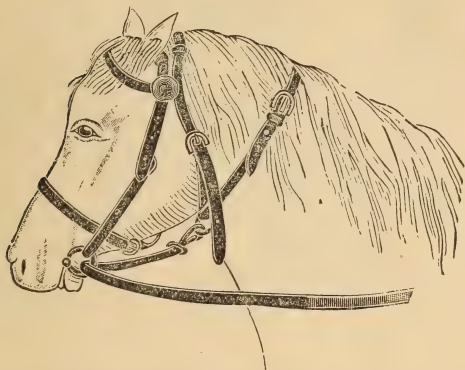
3. There is a parasite that attacks the heel and lower parts of the legs, especially the hind ones, and may be present for years without extending upon the body. This parasite lives on the surface, on the hairs, and among the scabs. It gives rise to great itching, stamping, rubbing of one leg with the other, and the formation of wounds, ulcerous sores and scabs. The intense itching will always suggest this parasite.

GENERAL TREATMENT.

Take two ounces of tobacco and two ounces of water; boil

thoroughly and then apply to the skin after removing the scabs with a soft cloth or brush; repeat this every fifteen days. Or take, 1 drachm carbolic acid,
2½ ounces of water.

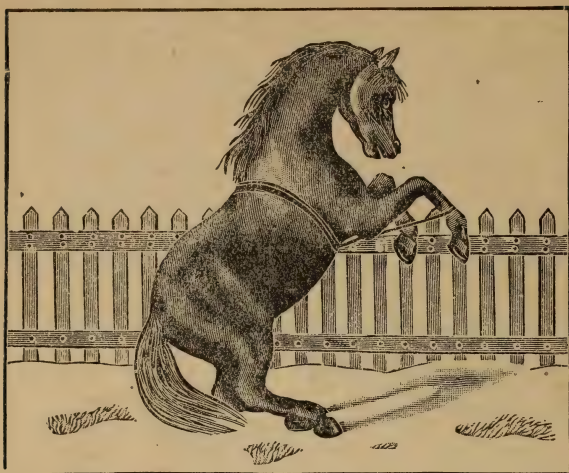
Mix and apply until a cure is effected.



How to Drive Pullers and Luggers on the Bit.

1. Professor Gleason, the most noted horse tamer on the continent if not in the world, recommends the following two methods for horses that pull and lug on the bit: Take a strap and buckle around the neck with a ring underneath the neck sewed on to the strap; now take the reins and pull through the bit rings and buckle into the ring on the strap that is around the neck. Here you have a purchase on the horse's lower jaw that will enable you to hold the worst puller with ease.

2. The second method is as follows: Take a strap about an inch wide and eighteen inches long, with a ring one and one-half inches in diameter sewed on to each end and two smaller rings running loose on the strap. Take and place the middle of the strap directly under the horse's lower jaw and bring the ends through the mouth from opposite sides. Buckle the reins into the larger rings and the check pieces of the bridle into the smaller ones. This makes one of the most effective appliances for a puller that can be used.

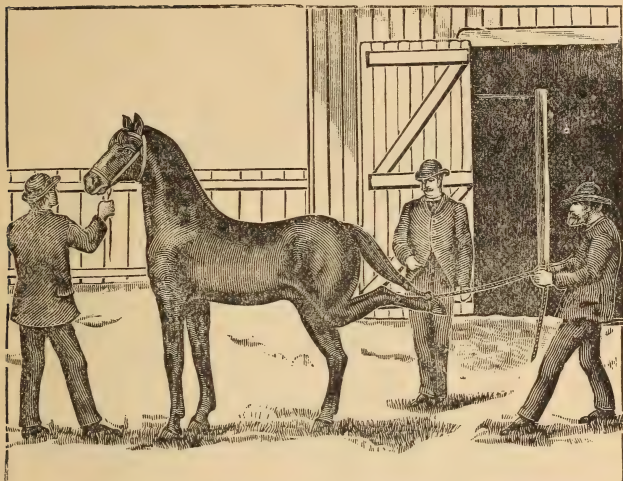


How to Prevent a Horse from Jumping Fences.

Buckle a strong surcingle around the body of the horse, with a ring in the bottom of the surcingle under the horse; then buckle a soft strap around both fore legs above the knee close up to the shoulder; then take a short rope or strap and fasten one end of it into the strap on off fore leg and draw moderately tight; this will allow the horse to move one leg at a time, to lie down, get up, but he cannot raise both legs at once, or put them forward at the same time.

A Sure Remedy for Tail-Switching.

Some horses have a very serious habit of switching their tail continually. To cure this place a collar on the horse and turn over the tail as shown in the above illustration; take an iron bolt or wooden pin about four inches long and double the hair of the tail over it and tie it firmly, and then a rope can be easily attached to it and fastened on the collar of the horse, and keep it fastened up in that way about eight or ten hours, and the next day about the same length of time. If any signs of switching are then seen repeat the treatment. One repetition is generally sufficient.

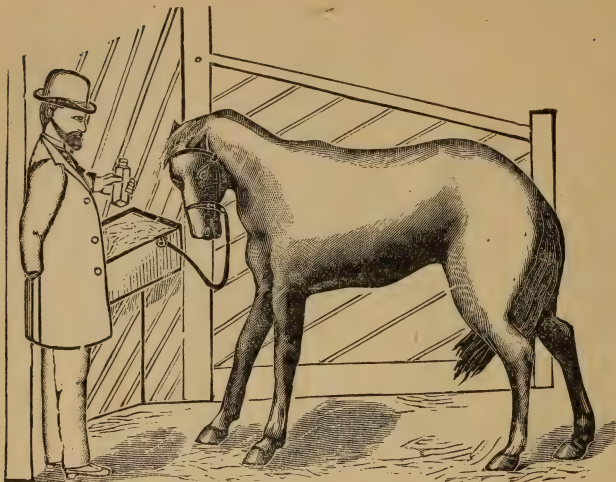


How to Shoe a Kicking Horse.

The dangerous work of shoeing a kicking horse can be made very easy. Take a small bolt or wooden pin five inches long and double the horse's tail over it and tie it firmly; then buckle a strap around the hind feet below the fetlock joint, having a ring in the strap; then tie a rope over the pin and run the end of the rope through the ring on the hind foot, and with the end in hand hold the rope tightly a little distance from the horse; then say to the horse: "Lift up your foot," and tighten the rope at the same time. After a few efforts to release himself he will give up all resistance, will soon be perfectly cured.

How to Keep a Horse from Pawing in the Stall.

Some horses have the habit of pawing in the stall, yet a simple remedy will break up the habit in a few nights. Take a small strap and buckle around the horse's leg above the knee; now take a small piece of rawhide and tie it to the strap which is buckled around the horse's leg above the knee; on the other end tie a small block of wood, say six inches long and about three inches square and let it hang down about seven inches, so that every time the horse paws, the block will strike its shin; it will be harmless but it will remind the horse that there is trouble, and a few nights will completely cure the nuisance.



THE RESULT OF A HEAVY MAN RIDING A YOUNG COLT.

A CURE FOR GALLS, CUTS, SORES, ULCERS, ETC.

Cleanse the sores thoroughly by washing them with castile or tar soap. Then apply the following ointment :

2 ounces of calomel,
4 ounces of white lead,
4 ounces of pulverized blood root,
4 ounces of pulverized alum.

Or,

4 ounces sweet oil,
2 ounces calomel,
4 ounces castile soap.

SWEENY.

Cause.—Sweeny is the result of straining the muscles on the outer side of the shoulder-blade. It occurs mainly in young horses. It is the result of too hard work or traveling on uneven ground and pulling a heavy load.

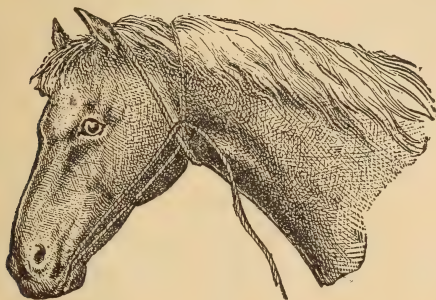
Symptoms.—Slight lameness, wasting away of the shoulder

muscles, which become tender to the hand when pressed upon. The difference can be seen by comparing the two shoulders.

Treatment.—Rub the shoulder severely with a flannel twice a day, or apply the following mild blister remedy:

1 pint of Ammonia,
3 pints of Lard.

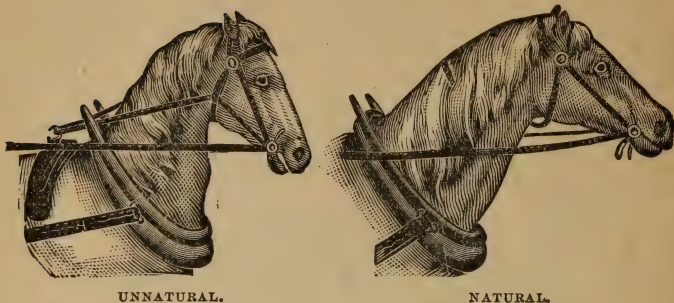
Apply twice a day and it will take the place of the friction caused by rubbing. Give the horse rest until fully recovered.



Prof. Gleason's Eureka Bridle.

(FOR SUBDUING VICIOUS HORSES.)

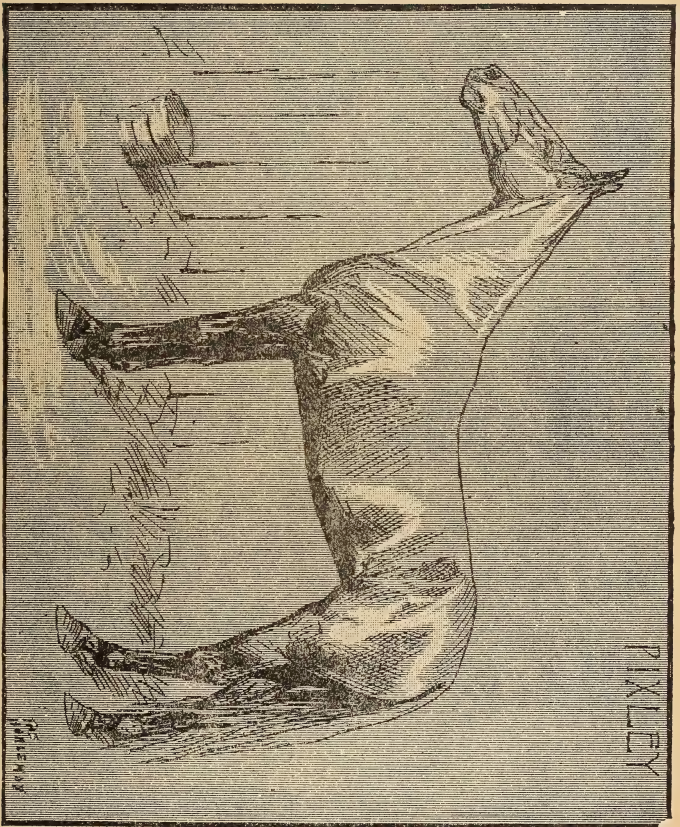
This is one of the most successful bridles, ever applied for the management of vicious horses, or for the purpose of doctoring the eyes or making surgical operations. It is made as follows: Take a small but strong piece of cord ten feet long and about one-eighth of an inch in diameter, with a slip noose in one end. To put on the bridle, first slip the noose around the neck, pass it through the mouth over the tongue, from the off side; then through the noose on the near side, and pull forward firmly; next over the head just behind the ears, from near side; then under upper lip, above upper jaw from off side, pass through second cord, and fasten firmly in a bow-knot. This bridle will hold any horse under any circumstances.



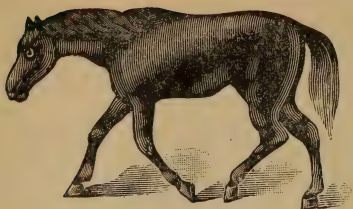
The Use and Abuse of the Check-Rein.

An overdrawn check-rein should never be used. It is nothing but cruelty to animals and ought to be prohibited by law. There is only one purpose for which a check-rein may be used and that is to compel a horse to keep his head off the ground, and then it is not necessary to be tightly drawn. A trotting horse can be steadied by it, but keeping a horse's head drawn up in a strained position all day is nothing but cruelty. The effect can easily be illustrated by a person having his head thrown back in this manner for hours at a time. The pain caused by a check-rein ought to create some sympathy for the poor dumb animals who have not only to endure the pain for hours but for days and weeks in succession.

A horse of style will show his natural condition without fastening his head in an unnatural position. Let us remember that the poor brute which cannot speak for itself is dependent entirely upon the mercy of man, and the torture which we inflict upon the suffering animal will sometime, no doubt, be meted out to us in some other way.



PIXLEY.—Bay Mare. Foaled 1885. 2:08¼ Trotting.

Shoulder Joint Lameness.

This is a very serious difficulty to remedy.

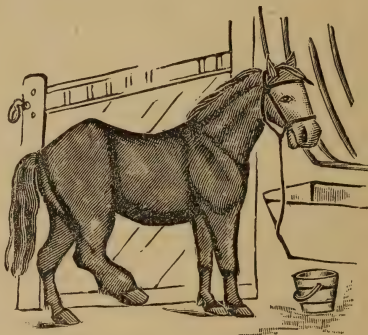
SYMPTOMS. The horse drags the leg with one toe on the ground and throws the leg out in attempting to move it and it is with great difficulty that the horse can rest its foot.

TREATMENT. This disease being similar to spavin in the hock-joint, should have similar treatment. If the part is very hot reduce the temperature by a cold cloth or a hot fomentation might work well instead of the cold ; then give same treatment as for spavin. Give the horse plenty of dry bedding and make it very soft and deep.

Water Farcy.

CAUSE. It is the result of weakness in old horses, and an inflammatory condition in the young. It is generally produced by long continued labor without proper hours of rest ; it sometimes causes debility, and water farcy is the result.

SYMPTOMS. The horse will hold the leg up as seen in the above illustration, and will generally be lame, will not eat, but will be very thirsty.



TREATMENT. Give the horse perfect rest, and feed ground feed well moistened ; a quantity of wheat bran may be profitably fed ; bathe the limb in cold water and rub every day, and apply bone liniment, found in other parts of the book. Give the horse some good condition powder daily for two weeks.

POLL-EVIL.

Causes.—A tight halter, or the use of the martingal in driving; the horse striking the head against the wall or joists when too low, or against any other object; blows dealt on the head, etc.

Symptoms.—A hot and tender swelling appearing on top of the neck, which soon breaks and discharges large quantities of thick and offensive matter, causing stiffness of the neck and rendering the horse a most loathsome object.

Treatment.— $\frac{1}{2}$ ounce of common potash,
1 drachm of extract of belledonna,
 $\frac{1}{2}$ ounce of gum arabic.

Dissolve the gum arabic in a little water; then mix and force into the ulcer with a small syringe. Cleanse the sore first with good tar soap and water. Only about one-quarter of this preparation should be used at once, and repeated in 3 days, if required.

BONE SPAVIN.

Cause.—Spavins are caused by sprains, blows, hard work, hereditary predisposition, etc.

Symptoms.—Lameness, with a swelling of the hock-joint. Lameness generally appears before the enlargement of the joint.

Treatment.—Many modes have been adopted in treating the Bone Spavin. Sharp instruments have been struck with considerable force into the joint, all kinds of blistering and caustic applications have been tried. Firing is also practiced. But all of these forms of treatment are very cruel and result in little benefit. The following prescription will be found as good as any other form of treatment:

1 drachm of bin-iodide of mercury,
2 ounces of lard.

Mix well together and apply once a day for two weeks

Another: 4 ounces of tincture of capsicum,
4 ounces of tincture of opium,
4 ounces of essence of sassafras,
4 ounces of essence of wormwood.

Mix and apply over the parts affected and rub briskly with the hand.

Dr. B. J. Kendall's Spavin Cure is also highly recommended.



A SURE SIGN OF WORMS.

WORMS.

Cause.—The cause is very uncertain, and many theories have been brought before the public.

Symptoms.—Symptoms of worms are a rough, harsh coat, irregular appetite, a rubbing of the tail, breath occasionally hot and fetid, and sometimes a short, dry cough, the animal appears poor in flesh and in spirits, and is sometimes attacked with convulsions, which may terminate in death, if not speedily relieved.

Treatment.—Give a good, strong dose of physic. If that is not sufficient, give the following prescription for three successive nights:

3 drams of calomel,
1 dram of tartar emetic.

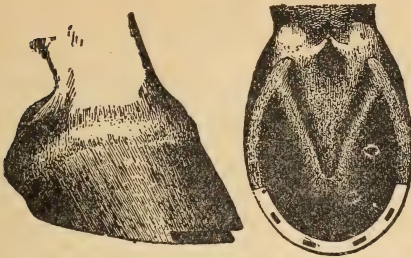
Mix, and divide into three powders.

RING-BONE.

Cause.—It is generally caused by a natural weakness of the joint, or is the result of injuries or overexertion.

Symptoms.—Lameness, with an inability to move the limb quickly.

Treatment.—The same as for Bone Spavin.



How to Cure Horses' Contracted Feet.

Shoe him with tips, as shown in the illustration below. These must be put on in a proper manner, or they will do more harm than good. The tip should be made of thin steel, and countersunk in the toe. By countersunk we mean that a space should be cut out of the horn of the toe just deep and large enough to admit a tip, so that the lower surface of the tip and the lower surface of the back part of the foot will be on an exact level.

How to Cure Weak Tendons.

Use the following Celebrated Receipt.

Zinc Sulphate	drachm i.
Tr. Iodine.....	drachm i.
Tr. Arnica.....	drachm ii.
Fl. Ext. Hamamelis	drachm ii.
Aqua, q. s.	pint ii.

Rub the tendons with this lotion and bandage, letting the bandage remain on for about two hours. Then the legs should have a good hand-rubbing, and in four or six hours the bandages may be again applied, and left for the same length of time. If the tendons are very bad, the bandage may be wet with the lotion before applying, and may remain on for three or four hours. Each time the bandages are removed have the legs well hand-rubbed. Reduce his work, giving simply exercise. If this treatment does not strengthen them, blistering should be resorted to with absolute rest for a few months.

ORO WILKES.



T. F. HENNING

ORO WILKES.—2:15 Trotting. Bl. h. Foaled 1890.

DISTEMPER, INFLUENZA, AND EPIZOOTIC.

Cause. The influences causing these disorders are not very well known. It attacks all grades of horses. Also considerable diversity of opinion exists as to whether it is contagious or not. Some eminent authorities claim that it is, and others claim that it is not.

Symptoms. Weakness, muscular debility, staggering walk, chills and shivering, loss of appetite, water discharged from the eyes, the pulse feeble and beating from fifty to sixty times per minute. The bowels and kidneys also suffer, the excretions being scanty.

Treatment. Place the animals in a warm, dry stall, blanket them well and bandage their legs. If very costive, give two drachms of aloes in a warm solution of water. Then give the following prescription:

4 ounces carbonate of ammonia,
4 ounces gentian.

Make into twelve pills and give one each morning and evening. If this remedy furnishes no relief, an experienced horse doctor should be summoned.

HOW TO CURE DISTEMPER.

3 ounces hops.
33 drops carbolic acid.

Put into two-thirds of a pailful of boiling water and force the animal to inhale the steam for fifteen or twenty minutes at a time three times a day. Apply a mustard poultice to the throat. Feed ground feed mixed in warm water. Give internally once a day:

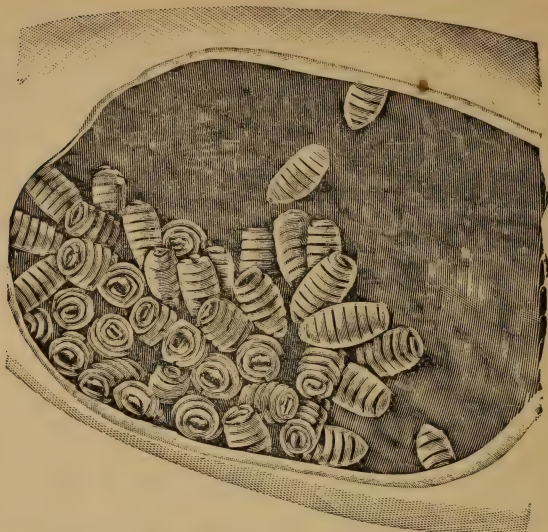
1 ounce powdered gentian,
3 ounces Peruvian bark,
1 ounce powdered copperas.

Mix, and divide into nine powders.

A CURE FOR CORNS.

For corns, remove the shoe and pare out carefully the horn over the corn and make the crust very thin, but leaving the ars of the frog untouched. Then apply the following prescription:

One quarter pound tar,
One quarter pound beeswax,
Three ounces glycerine,
One and a half pound lard,
Two drachms nitric acid.



BOTS AS THEY APPEAR IN THE STOMACH AND BOWELS OF THE HORSE.

BOTS—THE CORRECT TREATMENT.

Many wrong ideas prevail in reference to bots. All horses that are exposed to the bot-fly, must have bots more or less in their stomachs. Doctor Adams made the following experiment: Bots, when taken from the stomach alive, will live

In strong rum, 25 hours,

In strong decoction of tobacco, 11 hours,

In strong oil of vitriol, 2 hours and 18 minutes,

In essential oil of mint, 2 hours and 5 minutes.

They will live without apparent injury in spirits of camphor 10 hours, fish oil 49 hours, tincture aloes 10 hours. in brine 10 hours.

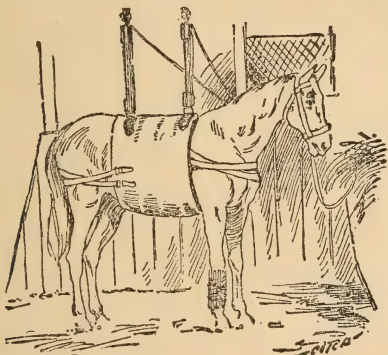
Common sense consequently teaches us that there is no medical remedy that will effect a cure for the bots, and there is no practicing veterinary surgeon who can tell the difference between bots and colic. Do not be misled. For colic or the bots give the following prescription :

6 ounces of whiskey,
7 ounces of new milk.

Give at one time. If not relieved repeat the dose in thirty minutes.

If the above remedy cures the horse, the disease is colic and not bots.

For bots give slippery elm tea, or potato juice. This will feed and quiet them, but they cannot be destroyed.



How to Set and Cure the Broken Leg of a Horse.

It was thought until recently that when a horses leg was broken that the only alternative would be to shoot the unfortunate animal. If a horses leg is broken below the knee or below the hock joint the leg can be set and the horses life saved.

The horse must first be swung up as in the above illustration. If the front leg is broken then allow his weight to rest on his hind feet, but if his hind leg is broken allow him to rest his weight on the front feet. The leg should be set in splints or plaster of paris, and the leg will knit together in about six weeks.

In this way valuable horses can without difficulty be saved for years of useful labor.

LAMPAS.

Cause.—It is the result of young horses cutting their teeth.

Symptoms.—A swelling of the ridges behind the upper front teeth, which often prevents the animal from eating his food.

Treatment.—Take a common pocket-knife and cut the enlarged ridges back of the front upper teeth slightly, so that they will bleed freely. Be very careful not to cut them too deeply, and feed the horse soft food for a few days.

INFLAMMATION OF THE LUNGS.

Cause.—Driving horses until they are well warmed up, and allowing them to stand in a cold atmosphere without being blanketed. Overexertion, or exposure to cold and storms.

Symptoms.—A horse stands with drooping head, legs apart, and wayward breathing. Shivering and irregular heat of the skin are common symptoms. A horse occasionally coughs, and the pulse is increased to seventy or eighty beats per minute.

Treatment.—Improper remedies will do more injury than good, and it is best, as a rule, to call a veterinary surgeon at once. Delay is very dangerous. From sixty to eighty drops of tincture aconite, given in water every two hours, at the same time giving one ounce of nitre in a pint of water, are excellent remedies to make use of, until a veterinary surgeon can be summoned.

HEAVES.

Cause.—The cause has never been satisfactorily ascertained. It is attributed by some to the derangement of the digestive organs, by others to rupture of the cells of the lungs.

Symptoms.—Peculiar double motion of the flanks, breathing quicker than natural, a short, peculiar cough, and a windy condition of the bowels.

Treatment.—The digestive organs should be kept in as healthy condition as possible. Feed wild prairie hay, well shaken up. The food should be moistened and the animal fed regularly. One teaspoonful of lobelia once a day, given in the food for a week at a time, will often greatly relieve the animal.

Another good remedy for the heaves is the following receipt:

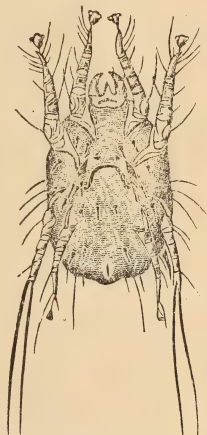
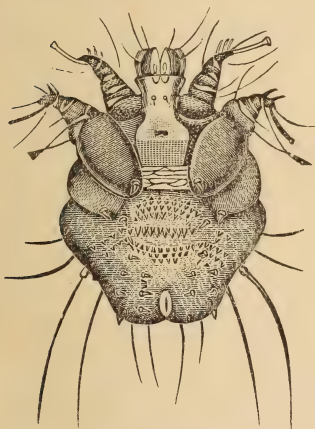
1 oz. saltpeter,
 $\frac{1}{2}$ oz. powdered ipecac,
4 pints rain water.

Mix and give a pint once or twice a day.

HOW TO STOP THE HEAVES QUICKLY.

2 ounces spanish brown,
3 ounces resin,
2 ounces gentian,
2 ounces lobelia,
8 ounces jamaica ginger.

Give a tablespoonful three times a day, and while giving this medicine the horse will show no indication of the heaves; but it is only a temporary relief and will not cure.



THE MANGE AND ITCH MITE GREATLY MAGNIFIED.

A CURE FOR THE ITCH, MANGE, ETC.

Cause. It is a contagious disease caused by insects burrowing in the skin.

Symptoms. Dirty and rusty color of the hair, skin covered with scales and dandruff, constant rubbing, and pimples about

the head and neck and under the mane. The hair falls out and the skin is dry and hard.

Treatment. Wash the horse thoroughly all over with castile soap. Then apply the following mixture:

4 ounces of sulphur,
4 ounces of white copperas,
4 ounces of white hellebore root, in powder.

Mix together in two quarts of buttermilk and rub the affected parts freely.

HIDEBOUND.

Cause.—Hard work, neglect, and exposure.

Symptoms.—The skin sticks very close to the ribs and appears immovable.

Treatment.—To remove the cause is the first step necessary to be taken. The following receipt will cure most cases:

2 ounces of anise seeds, in powder,
2 ounces of ginger, in powder,
1 ounce of grains of paradise,
2 ounces of mustard,
2 ounces of turmeric.

All to be powdered, and to be given in warm water, fasting, and to fast two hours after. Bleeding, tipping and physic are also good remedies.

FOUNDER.

Cause. Founder is produced by hard driving on a full stomach, and drinking large quantities of cold water when heated, or by eating large quantities of green feed, or over-eating grain or large quantities of ground feed.

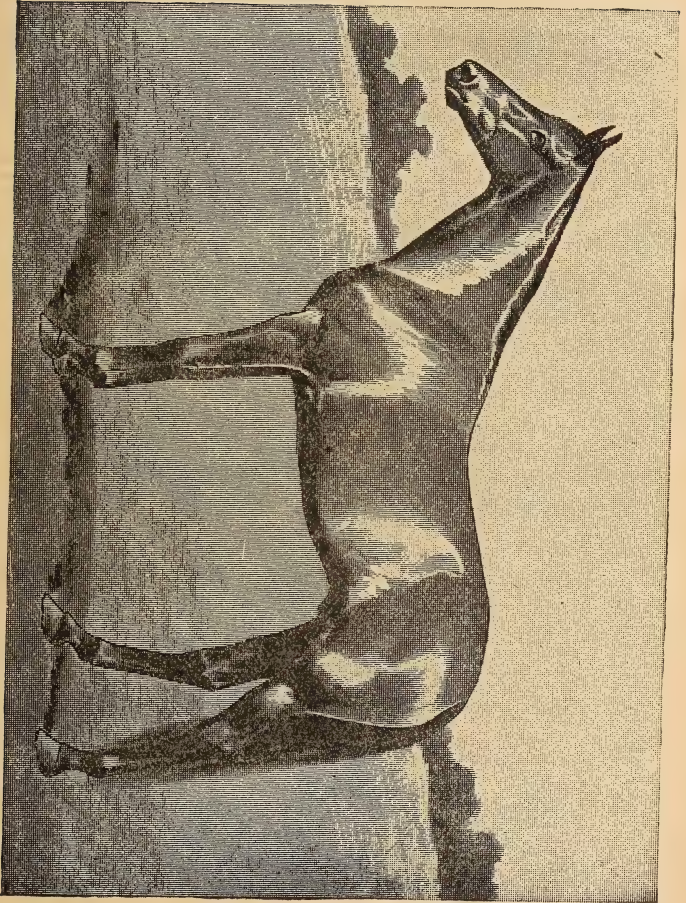
Symptoms. Stiffness and a disinclination to move. The limbs appear stiffened and benumbed. A restlessness shown by the continual looking around, tenderness of the bowels on pressure by the hand.

Treatment. Give one quart of linseed oil and bathe the legs with hot water. Bleeding is also recommended. A few hours after giving the linseed oil give the following prescription once a day, until cured:

Take, Spirits of turpentine, 1 ounce,
Oil of sassafras, 1 ounce,
Alum, powdered, 1 ounce,
Warm water, 1 pint.

Mix and give as a drench.

Large doses of aloes may be given, instead of the above prescription, with very beneficial results.

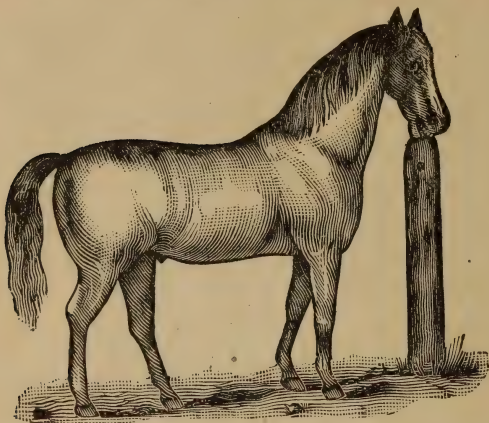


AXTELL. (3 yrs.) 2:12.)

SPLINT.

The splint is a small bony enlargement on the inside of the fore leg, just a little above the knee joint which generally occurs in young horses. It is the result of overwork or hard driving.

Treatment.—The same as for Bone Spavin.

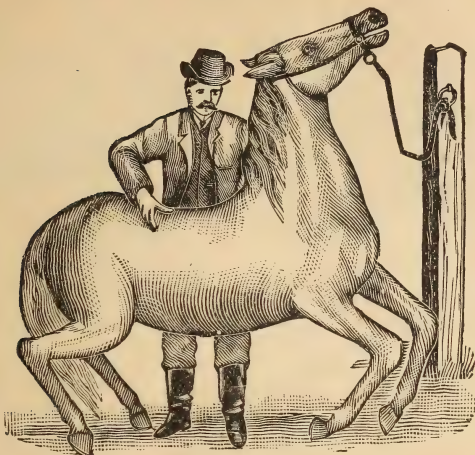


CRIBBING.

Cause.—Acidity of the stomach, the result of sameness or unwholesomeness of food. Poor ventilation in barns and stables.

Symptoms.—The animal rests his teeth on some firm substance, and stretches his neck and body backwards, in trying to throw off the gas which has accumulated in the stomach.

Treatment.—A Cribber is easily known by the rough and ragged appearance of the outer edges of the teeth. Place a box of rock salt and ashes near by, so that the animal can eat it at pleasure. It is a good plan to sprinkle a little lime or magnesia, for a few days, over the food. Cribbing is a difficult disease to cure, but care and perseverance will overcome it. Good ventilation and change of food are absolute necessities, to promote a cure.



INFLAMMATION OF THE KIDNEYS.

Cause.—Strain of the kidneys will cause inflammation in them. A lick over the kidneys, the foolish use of diuretic medicines, too free use of turpentine or resin, will cause it. Blisters may sometimes cause it. A blister all around the leg is said to cause it, or strangury.

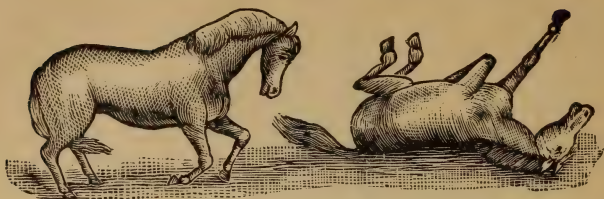
Symptoms.—A straddling in the hind legs, a constant straining and effort to make water, the water being passed in small quantity, and sometimes bloody. Pressing over the kidneys will show that it produces pain. The pulse and breathing are increased.

Treatment.—Give a dose of linseed-oil or aloes, after which give a small quantity of tobacco. Keep a flannel cloth, saturated with hot water and vinegar, over the kidneys for six hours. Then put on a mustard poultice. Give flaxseed tea freely until relieved.

A CURE FOR THE CURB.

Apply the following receipt morning and evening :

Pulv. cantharides, 1 ounce,
Citrine ointment, 4 ounces,
Olive oil, 1 ounce.



How to Cure the Colic in Horses.

Symptoms.—Sleepy look; at times very fidgety; pawing with one foot; caution in lying down; breathing labored; bloating; walking gives relief; legs and ears natural temperature.

A HOME REMEDY.

2 common tablespoonfuls (not heaping) of saleratus, mixed with $1\frac{1}{2}$ pints of sweet milk. Give in one dose.

Another Remedy.

Take 1 pint of whiskey and add 3 tablespoonfuls of common gunpowder. Give in one dose. If not better in one hour, repeat the dose, and give 1 pint of raw linseed oil.

The following is an excellent remedy for any form of colic, and should always be kept on hand. It should be given as soon as possible. If the dose does not relieve, follow it in half an hour with another:

Chloroform, 1 ounce,
Laudanum, 1 ounce,
Sulphuric ether, 1 ounce,
Linseed oil, 8 ounces.

DISEASE OF THE PENIS.

Small warty growths may be clipped off with scissors.

FOR ULCERS OF THE PENIS.

Wash with tar soap and warm water once a day, and then apply the following wash:

50 drops carbolic acid,
1 pint water,
1 drachm chloralhydrate.

LOCK-JAW.

This is a very serious disease and cannot receive attention too promptly.

Cause.—Exposure to cold, standing in the rain, hard driving, then suddenly cooling, fatigue and hunger, injuries, cuts, bruises, driving of nails in sensitive parts of the foot in shoeing, etc.

Symptoms.—Stiffness, straggling gait, stiffness of the jaws, swollen tongue, flowing of saliva from the mouth, and a flickering motion of the eyes.

Treatment.—If possible, give by the mouth one ounce of aloes and two drachms of calomel. Give injections of belladonna, half an ounce dissolved in a pail of water. Give upon the tongue every hour, twenty drops of the following mixture:

1 ounce of dilute hydrocyanic acid,
1 ounce of the tincture of aconite.

Mix, and shake well together.

THUMPS.

Cause. The thumps are generally the result of overwork or hard driving in hot weather.

Symptoms.—Violent beating or throbbing in the flanks. It is properly a palpitation of the heart.

Treatment.—Give the horse plenty of salt and rest. If this is not sufficient, give the following prescription three or four times a day:

Spirits of camphor, 1 ounce,
Muriate of ammonia, 10 grains,
Sweet spirits of nitre 1 ounce,
Water, 1 pint.

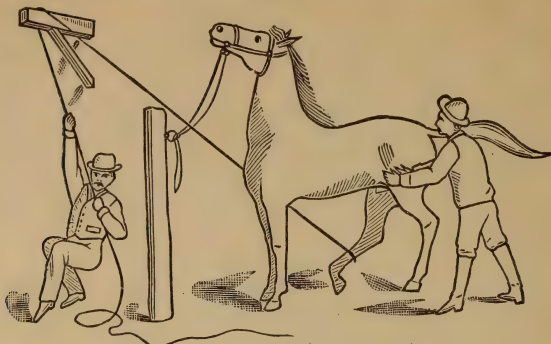
Mix, and give as a drench.

WIND-GALLS.

Wind-galls may be cured by tying on tightly a pad and bandage and leaving it on about two hours a day, morning and evening. It will usually disappear in the course of a week or two. Sometimes, however, it may take four or five weeks.

Another Method.

Draw the liquid out through the nozzle of a hypodermic syringe and apply a wet bandage. Wind-galls may be also removed by applying a strong solution of oak-bark and alum.



STIFLE-JOINT LAMENESS.

Cause.—This happens mostly to young horses, and it is a dislocation of the stifle, or patella, a little bone which slips off the main bone when the horse steps.

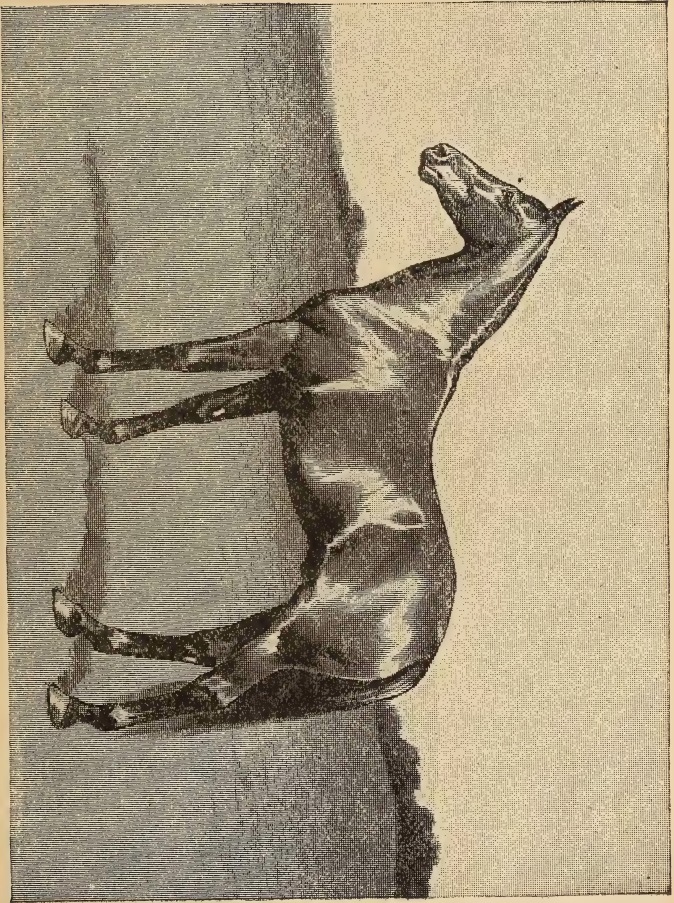
Symptoms.—The extending of one of the hind legs backward the extension of the head, and the swelling of the stifle joint.

Treatment.—The only thing to be done is to restore the bone to its proper place and apply hot vinegar to shrink the cords. In older horses the cords have become more stiffened, and when the patella is displaced, it takes considerable force to bring it back into its proper location. The above illustration will explain itself. Keep the horse quiet and feed well for two weeks.

For lameness, bruises, galls, etc., apply the following liniment. No better preparation is manufactured.

Alcohol, 95 per cent, 8 ounces,
 Spirits turpentine, 8 ounces,
 Oil of sassafras, 1 ounce,
 Oil of pennyroyal, 1 ounce,
 Oil of origanum, 1 ounce,
 Tinct. of arnica, 1 ounce,
 Tinct. of cantharides, 1 ounce,
 Tinct. of camphor, 1 ounce,
 Aqua ammonia, 1 ounce,
 British oil, 1 ounce.

Mix thoroughly, and use as a liniment.



THE FATHER OF TROTTERS, GEO. WILKES.

HOW TO CURE A FISTULA.

This disease is the same as Poll Evil, but instead of being on top of the head it is located along the raised part of the back and over the shoulders, known as withers. It is due to some violence or bruise.

Treatment.—Open it freely; when the bleeding has subsided, syringe it out with a ten per cent. solution of corrosive sublimate. Get a druggist to prepare the solution and use it carefully, it being poisonous. After syringing it out rub well in over a large surface around the sore one ounce of cerate of cantharides. Clip off the hair and clean the skin well before applying it. After 24 hours grease it. After four days wash it and syringe it out again as before, and again after another week. If this does not cure it, repeat the whole course as soon as the scabs of the blister comes off.

FOR SORE MOUTH.

Borax,	-	-	-	2 drachms,
Alum,	-	-	-	$\frac{1}{2}$ ounce,
Vinegar,	-	-	-	1 pint,
Soft water,	-	-	-	1 pint.

Shake well and wash the mouth every evening and morning. Feed little hay and feed a pint of flax-seed once a day until well.

TOO FREE DISCHARGE OF URINE; OR IN-
ABILITY TO HOLD WATER.

Give twice a day for two weeks the following prescription:
 $\frac{1}{4}$ ounce of cantharides, and keep the bowels open with grain or green feed.

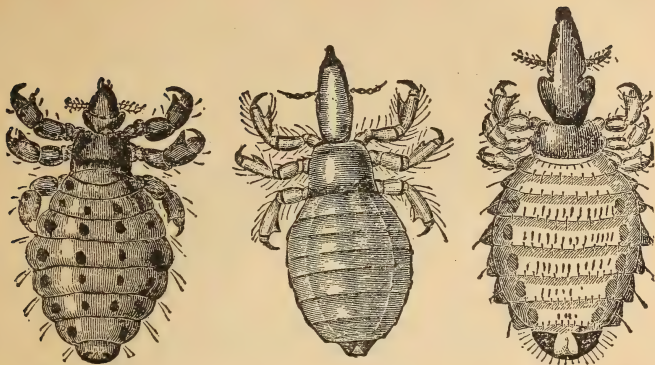
FOR HARNESS AND SADDLE GALLS.

Wash the sore parts thoroughly with castile soap and warm water every evening. Then apply a solution of common salt and sugar of lead (equal parts) after each washing.

SCRATCHES, CRACKED HEELS, MUD FEVER, ETC.

Wash the parts off thoroughly with warm water, and apply the following remedy:

1 ounce solution of diacetate of lead,
8 ounces glycerine.



TO DESTROY LICE IN HORSES AND CATTLE.

The first thing necessary is to clean the buildings and feed well the animals affected. Then

Take—4 ounces of lime,
1 gallon of warm water and mix together.

First, wash the animals thoroughly with the above.

Second, mix powdered sulphur and lard, equal parts, and the first warm day anoint the animals thoroughly.

COUGH BALL FOR HORSES.

$\frac{3}{4}$ ounce pulverized ipecac,
2 ounces camphor,
 $\frac{1}{2}$ ounce squills.

Mix with honey to form into a mass, and divide into eight balls. Give one every morning.

BLISTERING LINIMENT.

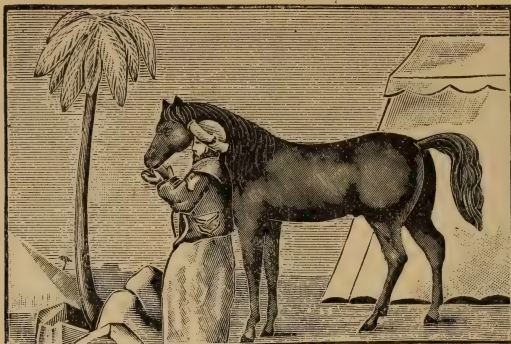
1 ounce of yellow resin,
3 ounces of lard,
1 ounce of spanish flies,
3 ounces of spirits of turpentine.

HOW TO GROW A LONG MANE AND TAIL.

Wash the parts thoroughly with soap and apply the following ointment: Powdered sulphur, 8 ounces,

Sweet oil, 4 ounces.

Apply by rubbing in thoroughly.



A GOOD CURE FOR SCRATCHES.

First remove the cause, then take gun powder and lard of equal parts, melt and mix thoroughly, and apply three times a day.

Or apply glycerine and water, in equal parts, and put into the mixture a few drops of carbolic acid.

Or take glycerine and aloes, equal parts. Bandage in all cases.

An application of sugar of lead is also a good remedy.

It takes time to cure the disease; and if the horse is feeble, ground feed well moistened should be fed.

How to Stop the Bleeding of a Horse or other Animals from a Wound, Snag, Cut, or Barbed Wire Injury.

Make an application of dry manure, and it will stop the bleeding of a wound at once.

AN EASY CURE FOR GLANDERS.

1 oz. of rock alum.

1 oz. of white vitriol.

Powder these well and put them into a pint of warm vinegar, and syringe about one ounce up the nostrils every day.

A CURE FOR SWOLLEN LEGS.

Bandage the legs in cloths wrung from hot waters and give one pint of linseed oil and one pint of sassafras tea.

Keep the leg bandaged for a few days, wringing out and applying cloths in hot water, whenever convenient.

Make a strong tea of equal parts of mullein leaves, mayapple roots, and poke roots, and add two handfuls of salt. Apply as hot as the horse can bear.

To Fatten Horses, or Strengthen Weak and Reduced Animals,

Use the following excellent receipt :

" PERSIAN CONDITION POWDER."

THE BEST IN USE.

Powd. black antimony, 4 ounces,
Powd. East India ginger, 8 ounces,
Powd. nitrate of potassium, 8 ounces,
Sulphur, 8 ounces,
Powd. rosin, 4 ounces,
Bicarbonate of soda, 8 ounces,
Glauber's salt, 12 ounces.

Mix them thoroughly.

Dose.—1 tablespoonful to a pound of feed.

To Make Ointment for Horses.

Cracked Hoof Ointment.—Tar and tallow, equal parts melted together.

For Grease.—Mix four ounces lard with one ounce white lead.

Heel Ointment.—To the Cracked Hoof Ointment, add 3 ounce of Verdigris to each pound.

For Mange.—Soft soap, oil of turpentine, lard, and flower of sulphur, 4 ounces each. Mix well.



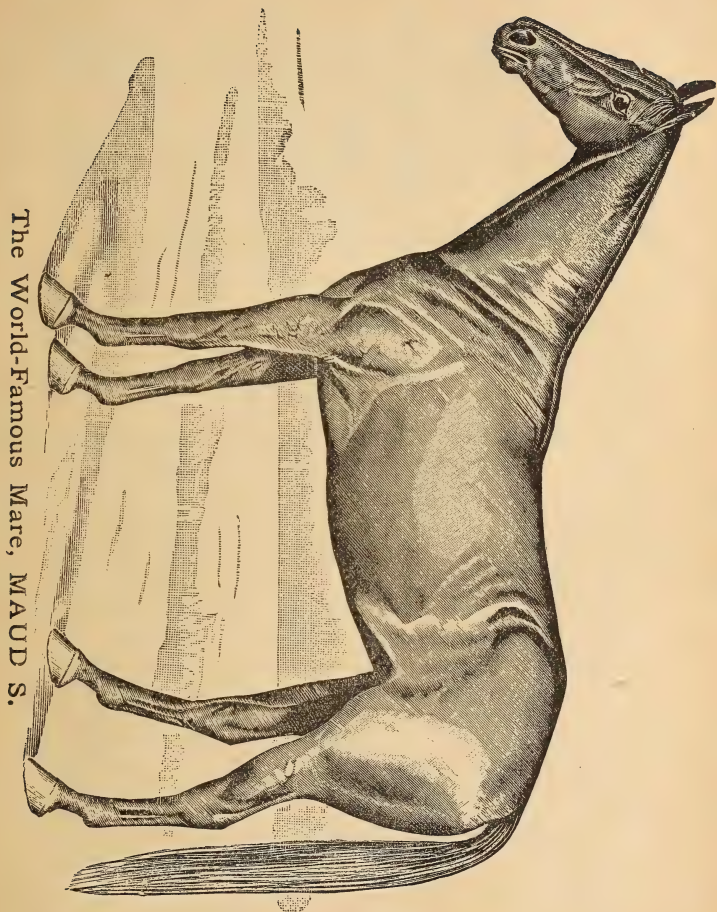
How to Manage a Balky Horse.

A balky horse is generally the result of a balky driver. A high-spirited horse, with bad management, is liable to become balky.

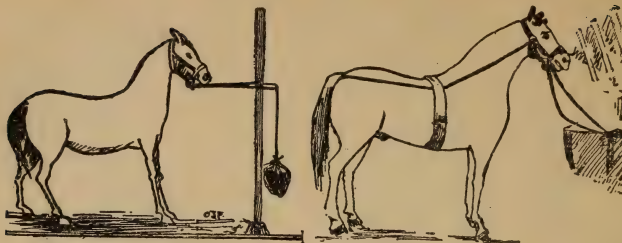
Remedy.—Lead the horse kindly about with a halter, petting him occasionally, and let him know that no harm is awaiting him. Then put on a harness and drive him, being very careful to have him observe every command, at the same time doing it very gently. Then hitch him into a light buggy and drive him awhile. By careful treatment in this way he will soon be taught to draw steadily and strongly at any load. The trouble with balky horses is that a driver will soon become provoked, and by slashing and cracking the whip, and abusing the animal, it strengthens the bad habit instead of overcoming it. There is no such thing as a balky horse, if kind and proper treatment is administered.

Strength of Horses Drawing a Load.

What one horse can draw on iron rails on a level road, it will take five horses to draw the same load on ordinary stone pavement, seven on good cobblestone, twenty on ordinary earth road, and forty on a sandy road.



The World-Famous Mare, MAUD S.



A Sure Remedy for Halter Pulling.

1. This is a very serious and annoying trait, and very difficult to overcome. Many runaways occur, much damage is done, and many lives are lost, by horses, which can not be safely tied.

2. *Remedy.*—Bore a hole through a plank, and spike it upright in front of the manger, with the hole about six feet from the floor. Take a strong rope, and tie one end into the halter and run it through the hole in the plank; then tie a stone 200 pounds in weight to the other end, giving the horse about the usual length of halter.

3. In order to have the stone swing clear, nail a piece of board or scantling just beneath the hole in the plank.

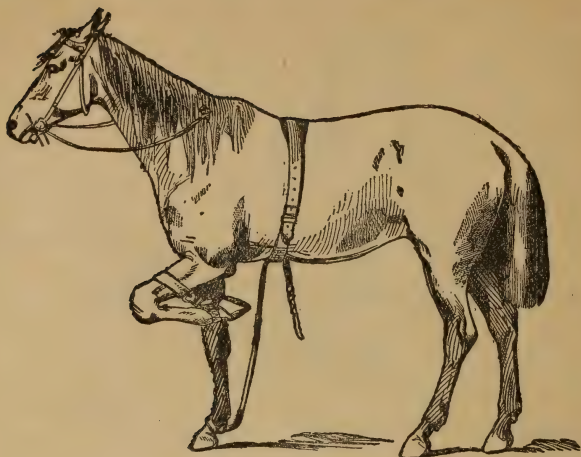
4. *Another Method.*—Take a $\frac{5}{8}$ inch rope, one end of which pass through the lower side ring of the halter, then through the top side ring of the halter, then under the tail of the horse, then back to the halter and pass through the two rings of the halter on the other side (same as first), then use the two ends of the rope for a hitching strap.

5. A surcingle is necessary, in order to keep the rope in its place.



How to Subdue Vicious Horses.

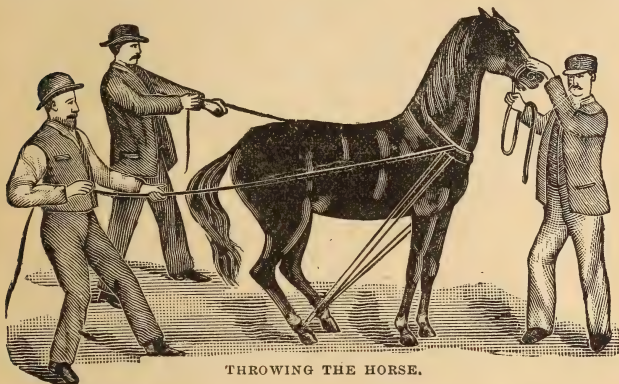
1. The first thing necessary is kindness and gentleness.
2. If the horse is very vicious, take one fore-foot and bend his knee until his hoof is bottom upward and nearly touching his body. Then slip a loop over his knee and shove it up until it comes above the pastern-joint, having a small strap attached so as to hold the loop in place, to keep it from slipping down. This will keep the horse standing on three legs.
3. There is something in this operation in keeping up one foot that from the first completely conquers a horse.
4. You can do anything you wish with the horse in this condition, and when he becomes convinced that you are master of the situation he soon becomes docile and quiet.
5. When a horse is first fastened in this way, he is liable to become very excited, and will plunge and strike with his knee, but he will soon become quiet and manageable. A few such trainings will conquer the most vicious animal.



How to Make a Horse Lie Down.

Fasten the fore-foot of the horse as shown in the above illustration. Then put a surcingle around his body and fasten one end of a long strap around the other fore-leg, just above the hoof. Place the other end under the surcingle, so as to keep the strap in the right direction. Take hold of it with your right hand; stand on the left side of the horse; take the bit in your left hand, pull steadily on the strap with your right; bear against his shoulder till you cause him to move. As soon as he lifts his weight, your pulling will raise the other foot, and he will have to come on his knees. Keep the strap tight in your hand, so that he can not straighten his leg. Hold him in this position and turn his head towards you; bear against his side with your shoulder, kindly but steadily, and in about ten minutes the horse will lie down perfectly conquered. Then take off the strap; straighten out his legs; pet him for a few minutes, and then let him rise. Repeat this about twice a day for a few days, and the horse will lie down whenever the proper signs are given him. If the horse has fought hard in going

down he will usually lie very still, and you can scrape the sweat off and rub him down, and he will lie perfectly quiet. In this position you have the opportunity of making him perfectly familiar with you, and the more you fondle him and reconcile him to you, the better. A vicious horse is thus conquered, and an intelligent horse is made to perform a convenient and pleasant trick.



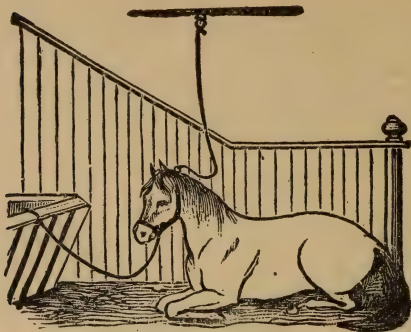
THROWING THE HORSE.

How to Break a Horse from Kicking.

In the above illustration you will find a common method for throwing a horse.

Put on a strong bridle, so that the horse can be easily held, and attach the ropes, as shown in above cut. After throwing the horse a few times, each time letting him rise at his own pleasure, at the same time speaking gently and handling him as much as may be deemed necessary, the horse will soon become exhausted, and most anything can be placed at his heels and he will not make any effort to kick. The ropes attached will keep him from extending his legs, and by that means he will soon learn to stop making the effort.

One lesson a day, for one week, will cure the most vicious horse.



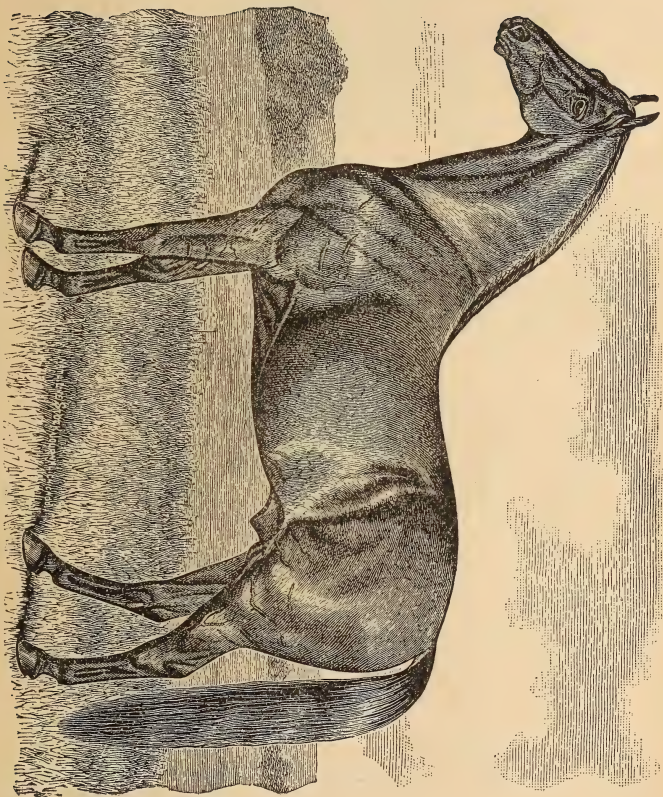
How to Keep a Horse or Colt From Getting Cast.

1. Many horses have the trouble of getting cast, and often are crippled and ruined in a single night. The above illustration is an excellent remedy to train horses or colts to lie quietly and comfortably in their stall.

2. Take a strap and fasten it to a joist or hook overhead, so the animal cannot get its head quite down to the floor, and hitch the horse to the manger with the usual length of halter.

3. Colts which are worked very hard, or possess a nervous temperament, are more frequently liable to be cast in their stalls.

4. Colts should never be worked too hard. Give them a chance to grow and mature, if you want a good valuable and salable horse.



GUY WILKES.—Record, 2:15¼.

**STRING HALT.**

It is easily known by the horse lifting up the hind leg when raised from the ground. It may be slightly manifested, or in extreme cases the fetlock may even strike the belly.

Cause. Strains, bad usage, and poor feeding.

Remedy. The longer it remains uncured the more obstinate it will become. Give nourishing food, and rub the limb thoroughly each day. The following Liniment will prove excellent;

- 1 ounce Oil of Origanum.
- 1 ounce Laudanum.
- 1 ounce Sassafras.
- 1 ounce Tincture of Camphor.
- 1 ounce Oil Cedar.
- 1 ounce Spirits of Ammonia.
- 1 ounce Sweet Oil.

Mix in two quarts of alcohol. This receipt is also excellent for swellings, bruises or burns.



How to Teach Horses Tricks.

1. It is an excellent practice to teach a horse a few tricks. An intelligent horse will learn very easily and will enjoy training. It will create more affection and interest for the horse. Most of the tricks are very simple and easily taught.

2. *To make a Bow.*—Take a common pin and prick him in the breast very lightly. The horse will move his head up and down the same as he would in brushing a fly from his breast. Repeat this until the horse will move his head up and down at the slightest movement of the hand, and in a few lessons he will make a bow whenever spoken too.

3. *To lie down.*—To make a horse lie down, use the strap as shown in "Controlling Vicious Horses," and throw the horse or colt quickly, at the same time telling him to lie down, but be sure and always speak the words emphatically *to lie down* as you throw him. Use any of the common methods for throwing a horse.

4. *How to sit up.*—First put a bridle on the horse and cause him to lie down. Then step behind him and place the right foot on his tail, keeping the reins in your hands and by standing up on the horse's tail and pulling the bridle rein tightly you can teach an intelligent horse to sit up quite readily.

5. *To shake hands.*—Place a strap around the horse's leg next to the hoof, and stand directly in front. Then say shake hands, at the same time pulling the strap and pulling his foot forward. He will soon learn to do this without the strap if the necessary patience is applied.

6. *To say no.*—Stand at the side of the horse, holding a pin in your hand, and prick him lightly in the withers and the horse will shake his head as though he were driving away a fly. You can soon train your horse to do this so nicely that he will shake his head at the word of command.

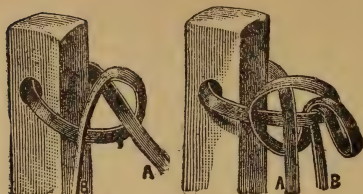
7. *Various Tricks.*—A horse may be taught to do many things if patience and perseverance is practiced on the part of his trainer. A colt may be taken when very young and taught many interesting and amusing tricks. A horse can be taught to be driven without bridle or lines, or to jump over a pole or fence, and many other interesting and amusing things. Patience, perseverance and kindness will do most anything with an intelligent horse.

To Break a Wild or Ugly Horse,

Place him in a pen, as shown in the illustration on next page. Then take a short whip and make him keep his head towards you. You will soon be able to pet him and completely conquer his fear. Avoid whipping; it is ruinous.



Breaking a Wild or Desperate Horse.



The Safest Way to Tie a Halter.

How best to tie the halter, strap or rope, or whatever it may be, is shown in the two cuts herewith. The first shows the first stage. The knot is completed by pulling on the loop until the knot is tight. Then pull on the free end of the strap B, until the loop is just large enough for B to pass through it. Pass B through and draw it through as far as possible. The horse cannot possibly get this knot open; and the harder he pulls the safer the knot. To untie the knot, draw B from the loop, and then a sharp pull on B will open the knot. A is the halter end of the strap.

How to Clean Leather.

When leather is old and greasy, it should be thoroughly washed and cleaned before applying oil or any preparation for polish.

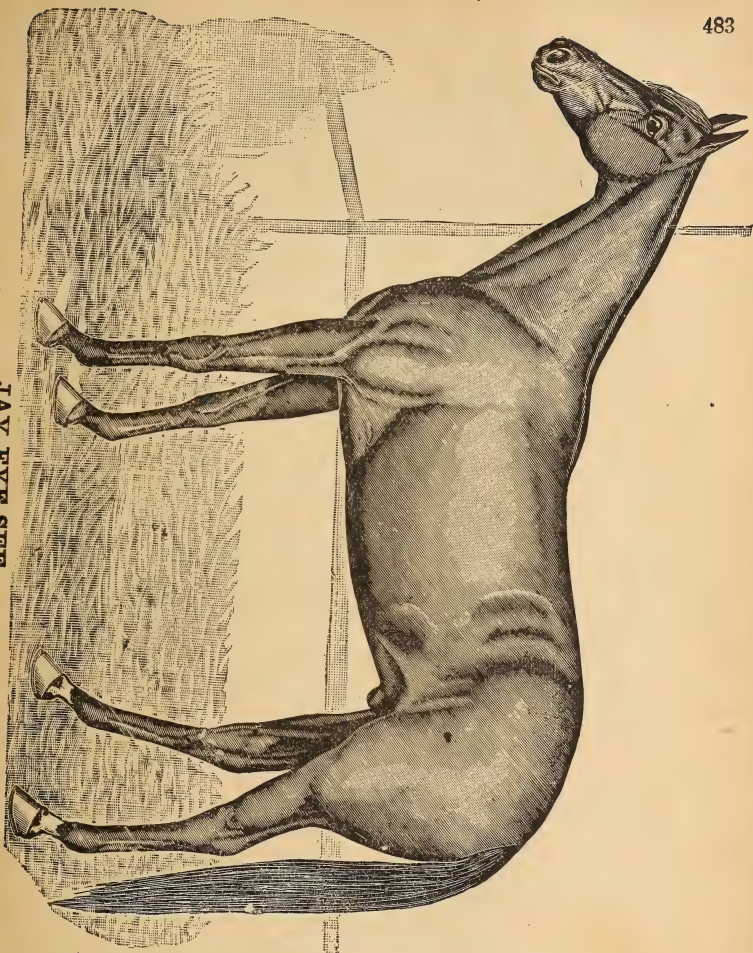
Wash the leather thoroughly with soft water and ammonia, or rub the leather with a weak solution of potash and water.

How to Clean Light-Colored Leather.

Fawn or yellow-colored leather may be cleaned by taking one quart of skim milk mixed with one ounce of sulphuric acid, and when cold add to it four ounces of hydrochloric acid.

Shake the bottle gently until it ceases to emit white vapors. Then strain through a fine sieve and put into a bottle.

JAY EYE SEE.





HOW TO DOCTOR CATTLE.

BLACK LEG.

Cause.—This disease is considered epidemic. Fat cattle are generally the victims. It is a disease that is not very general.

Symptoms.—Difficult breathing, moaning or groaning, restlessness, generally lameness in one leg, moving with great difficulty, fever and dryness of the nose, and swelling of the fore and hind quarters.

Treatment.—Saturate a blanket with cold water and keep the animal well covered, but changing it occasionally to keep the blanket cool. This reduces the fever. Then give the following prescription :

Take—Tartar emetic, 40 grains,
Tincture of digitalis, 1 ounce,
Mix in cold water, 1 pint.

Repeat the above dose every two hours, omitting the digitalis after the first two doses.

BLACK TONGUE.

Take—Powdered burnt alum, 4 ounces,
Chloride of lime, 2 ounces,
Corn meal, 2 quarts.

Mix all together, and with this powder swab the mouth several times a day. No part within the mouth should escape the application.

CATTLE COLIC OR HOOVE.

Cause.—Eating large quantities of wet grass, clover, turnips, etc., which causes an accumulation of gas.

Symptoms.—Serious distress and bloating, frequently threatening suffocation.

Treatment.—Give the following prescription :

1 ounce of spirits of hartshorn,
1 quart of water.

Mix, and give at once.

If the above prescription is not readily obtained, give two ounces of table salt dissolved in one quart of water.

If the above treatment is of no relief, extreme treatment must be resorted to. Take a small knife and pierce the abdomen slightly, and place into the cut a common clay pipe-stem or a small tube made of a piece of elder. This will usually give instant relief.

COW-POX.

Two varieties of sore teats occur in the cow, in the form of pustular eruptions. They first appear as small vesicles containing a purulent matter, and subsequently assume a scabby appearance, or small ulcers remain, which often prove troublesome to heal.

Treatment.—Foment the teats well with warm water and castile soap, after which, wipe the bag dry, and dress with citrine ointment. The preparations of iodine have also been recommended, and they are very serviceable.

INFLAMMATION OF THE BRAIN.

Take—Tartar emetic, 60 grains,
Spirits of nitre, 2 ounces,
Tincture veratrum veride, 1 ounce.

Mix, and give every four hours until the inflammation is subdued; after that, give smaller doses and not so often.

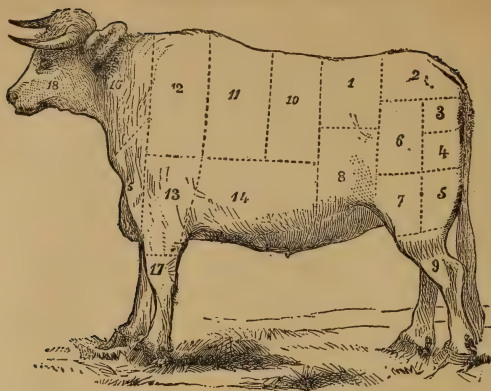
INFLAMMATION OF THE BLADDER.

Give internally one of the following powders every hour until relieved :

Nitrate of potassa, 1 ounce,
Tartrate of antimony, 1 drachm,
Pulverized digitalis leaves, 1 drachm.

Mix, and divide into six powders.

Boiled flaxseed draughts should be freely given.



OX, SHOWING THE MODE OF CUTTING UP THE VARIOUS JOINTS.

INFLAMMATION OF THE BOWELS.

Cause.—Overloading the stomach with musty food, sudden chills after hard work, kicks and blows on the belly, or protracted colic.

Symptoms.—The symptoms are similar to colic, only milder in form. Shivering, labored breathing, lies down very cautiously, will sometimes roll or plunge spasmodically. Pressure on the abdomen gives great pain, while in colic it relieves the pain.

Treatment.—Give eight ounces of linseed oil if the bowels are constipated. Then give the following prescription every three hours :

1 ounce of tincture of belladonna,
1 ounce of essence of sassafras.

Give one-half teaspoonful in half a pint of water. Take good care and give the animal all the cold water it will drink. The disease usually lasts from five to fourteen days. Severe cases usually prove fatal.

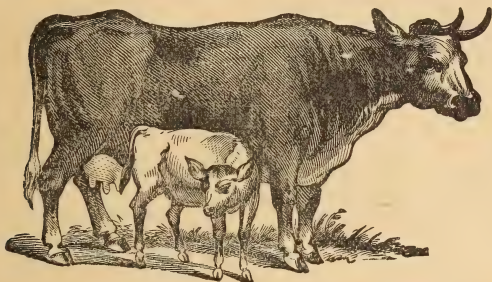
INFLAMMATION OF THE KIDNEYS.

Treatment.—Give one pint of linseed oil and ten drops of castor oil mixed together ; follow this with small doses of salts once a day, for three or four days ; give injections of water, one half a gallon to two ounces of tincture of arnica. Mustard applications to the loins are also very useful.

FOR HOLLOW-HORN.

Take—Pulverized nitre, 2 ounces,
Ground ginger, 4 ounces,
Black antimony, 2 ounces,
Flowers of sulphur, 2 ounces.

Pour two or three tablespoonfuls of turpentine in the hollow back of the horns, and rub the horns well with it.



For Sore Teats, Ulcers, Wounds, Bruises, Etc.,

apply the following

‘RELIABLE HEALING OINTMENT.’

Resin, 5 ounces,
Lard, 8 ounces,
Yellow wax, 2 ounces.

Melt them all together, strain through linen, and stir them constantly until cool.

FOR LAMENESS, ETC.,

apply the liniment prescribed on page 271.

DEHORNING REMEDY.

A calf can be prevented from having horns by an application of crude potash to the spot where the incipient horn can be felt, so Waldo F. Brown says. The plan of dehorning is gaining in favor, and done in this way has much to commend it.

PLEURO-PNEUMONIA.

Cause.—This disease is an inflammation of the lungs and the membranes covering the lungs and chest, commonly called the *Pleuro*. It is a contagious, infectious, and epizootic disease.

Symptoms.—Reduced and irregular appetite, dry cough, the back and the sides along the chest become tender, labored breathing, the nose hot and dry, rumination entirely or partially suspended.

Treatment.—The first thing to do is to separate the diseased cattle from the herd, and give the affected ones the following prescription every day :

2 drachms of sulphate of iron,
1 drachm of carbolic acid.

There are other systems of treatment, such as inoculation, burning of sulphur in the stable, but the only sure remedy is to separate the cattle and keep them separated, and if the affected ones die, it will not injure the others.

DYSENTERY OR FLUX.

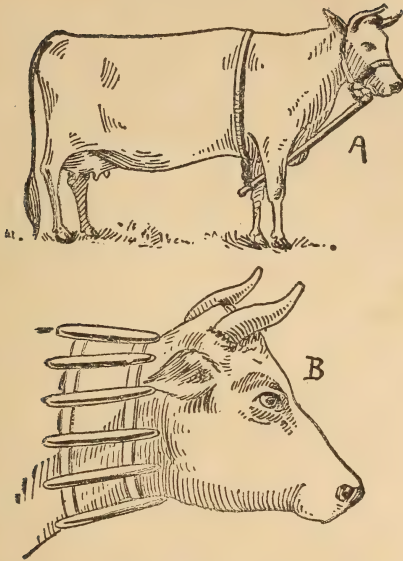
Take—Castor oil, 1½ pints,
Spirits of turpentine, 1 ounce,
Mix, and give as a drench. After it acts,
Take—Powdered opium, 40 grains,
Calomel, 40 grains.
Mix, and give in half a pint of gruel.

MURRAIN.

Cause.—The cause is unknown. It is a constitutional disease and the worst that farmers have to deal with. It is also considered contagious.

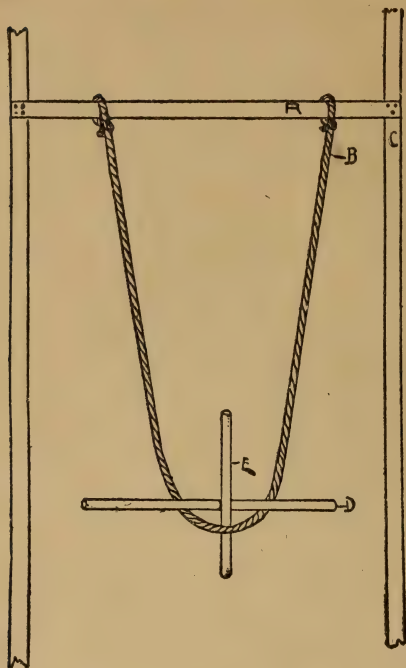
Symptoms.—High fever, painful cough, with small, hard, and rapid pulse, sometimes sore teats, mouth, and feet, diarrhœa, weeping and swollen eyes.

Treatment.—Give one-fourth pound of epsom salts, with one drachm of jamaica ginger, twice a day, for two or three days. Very little medicine is required internally in this disease, but much depends upon good nursing.

**Self-Sucking Cow.—Simple Ways of Preventing the Habit.**

From the numerous devices given for keeping cows from sucking themselves we have selected the two shown in the illustration as among the most successful and easily made and tried. The one in the upper part, A, is made as follows: A strap is fastened around the body of the cow and a halter put on her head. A stick is attached to the halter and reaching between the front legs is fastened to the strap around the body. This prevents getting her head around.

The device shown in the lower part, B, is simply a necklace made from old broom or fork handles strung on a strap and buckled around the neck. Fit it to the cow and make the sticks long enough to keep her from putting her head on the side, but be sure they are not long enough to chafe the shoulders or throat when the head is not turned.



A Simple Contrivance For Lifting a Beef.

Use the space in a double corn crib or driveway in a barn. To a crosspiece, represented at A in the illustration, placed over this driveway, adjust a $\frac{3}{4}$ inch rope, B, as for a swing. After placing the beef on the gamble, D, put the rope swing under it between the legs, lay a stout stick on the middle of the gamble and under the rope, then turn the stick: the rope winds around the gamble. Two men can very easily lift a beef in this way without trouble.

N. B.—The stick E is short and can be turned easily between the legs of the beef. Try it.



HOW TO DOCTOR SHEEP.

The walls of the stomach of the sheep are but slightly acted upon except by doses of very improper magnitude. Medicines to reach the fourth stomach, should be given in a fluid state if possible, and even then it may be given in such a manner as to defeat the object. In giving a sheep liquid medicine it should be given very slowly. The pulse of the sheep is about 65 per minute.

BRONCHITIS.

Give salt in doses of two ounces, and lime water in doses of 8 ounces.

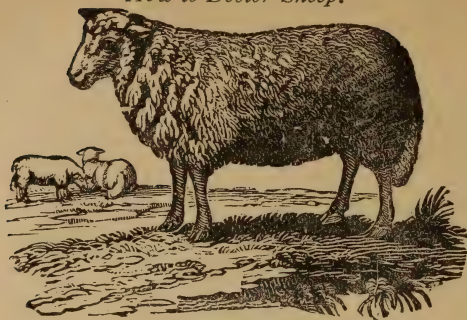
COLIC.

$\frac{1}{2}$ ounce epsom salts,
1 drachm jamaica ginger,
60 drops essence of peppermint.

LUNG FEVER.

Give the following dose every 2 hours :

Take— $\frac{1}{2}$ drachm tincture of digitalis,
 $\frac{1}{2}$ ounce spirits of nitre,
2 grains tartar emetic.



CATARRH.

Give flaxseed, or some other laxative.

DYSENTERY.

Take— $\frac{1}{2}$ ounce powdered golden seal; 1 ounce powdered charcoal; 1 ounce prepared chalk; $\frac{1}{2}$ drachm powdered catechu; $\frac{1}{2}$ drachm ginger.

Mix, and give one rounding teaspoonful twice a day. If not well in two days, double the dose.

ROT.

If the foot gives an offensive smell, wash with a solution of chloride of lime, 2 ounces; rain water, 3 pints.

MAGGOTS.

The horns of rams may grow very closely to their heads and maggots may accumulate underneath. Apply powdered tar and they will soon disappear.

SORE MOUTH.

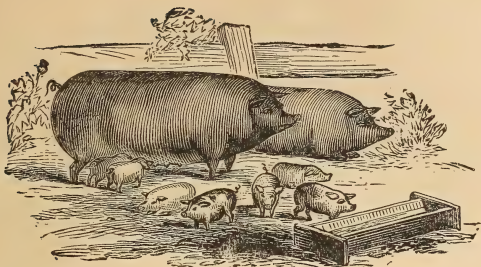
Daub the lips and mouth plentifully with tar.

FOR SCAB OR MANGE.

Dip into a strong tea of tobacco, or apply the following wash:
1 quart tobacco tea; $\frac{1}{2}$ pint spirits turpentine;
1 drachm corrosive sublimate.

SHEEP TICK AND LICE.

After the sheep have been sheared two weeks boil a refuse quantity of tobacco leaves, or 5 or 6 pounds of plug tobacco. Put the liquid into a trough and dip the sheep, being careful to keep their heads out. This quantity will wash about one hundred sheep.



HOW TO DOCTOR HOGS.

In the treatment of the hog we cannot enter into details. In sickness he is not a very good patient, and about all that can be done, is to administer a little medicine in his food.

HOW TO CATCH A HOG.

Swine are very difficult animals to handle or master. The following method of getting hold of them has been highly recommended:

RULE.—Fasten a double cord to the end of a stick, and beneath the stick let there be a running noose in the cord; tie a piece of bread to the cord, and present it to the animal; and when he opens his mouth to seize the bread, catch the upper jaw in the noose, and draw it tight, and the pig is fast.

Another method is, to catch one foot in a running noose. This can be applied in various ways: either by suspending it or dropping it on the ground and allowing the hog to step within it, and then jerking it up and catching the leg. Another method is, to take a pole and fasten a long, narrow hook, with a large opening, on the end of it. This can be readily hooked around the hind leg and it will hold the strongest animal.



A piece of the diseased meat greatly magnified.

THE DREADFUL DISEASE, TRICHINA SPIRALIS.

Trichina are microscopic worms which infest the muscles, intestines, etc. The mature worms live in the intestines of the animal, and the immature, or minute worms, live in the muscles. This is one of the most serious diseases that attacks the American hog.

Symptoms.—After eating the flesh of animals affected with trichina it takes from 8 to 15 days to manifest the symptoms. They are severe muscular pains, stiffness of the limbs, and sometimes considerable swelling on the skin; in man the disease is often taken for rheumatism or typhoid fever, and produces loss of appetite, indisposition to move, pain and stiffness.

Treatment.—Give a strong dose of physic. Then give the following prescription to diseased animals :

2 drachms of asafoetida,
4 drachms of azedarach.

Mix, and give the same once a day in eight doses.

Glycerine, given internally, is also an excellent remedy for trichina.

CAUTION.—Never eat pork, unless it is well and thoroughly cooked.



HOG CHOLERA, AND HOW TO TREAT IT.

In the treatment of hog cholera very little can be done. The diseased animals are always a poison to the healthy ones, and complete separation should be effected at once. There are a thousand different remedies advertised, but none of them are effectual. The government has been investigating the subject many years and as yet has found no specific. The following may be done and will add as much as anything to the safety of a herd of swine :

1. Removal of still healthy animals to inclosed uninfected ground or pens as far as possible from infected localities.
2. Destruction of all diseased animals.
3. Careful burial or burning of carcasses.
4. Repeated thorough disinfection of the infected premises.
5. Great cleanliness, both as to surroundings and as regards the food, to prevent its becoming infected.
6. Place from one-half to one pound of lime into a gallon of water and give once a day. This is an excellent disinfectant.
7. In view of the fact that very few of the diseased animals ever recover, and there is little in those which do recover, there is but little use to resort to medical treatment in the endeavor to cure diseased animals.
8. The better way is to kill the diseased animals and burn them, and thus destroy them at once.

THE BEST REMEDY KNOWN FOR HOG CHOLERA.

If the disease prevails in the community, it is very difficult to avoid its attack.

Symptoms.—Loss of energy and appetite, lying down by himself, moving slowly, evacuations of a dark color, bad odor, feet and legs cold; after death the abdomen becomes of a dark purple color.

Treatment.—An excellent preventive is the following: Burn corncobs into charcoal and feed it freely. Mix well together :

6 pounds of powdered sulphur,
1 pound of animal charcoal,
6 ounces of sulphate of iron,
1 pound of pulverized cinchona.

Mix about a tablespoonful for each animal in a few potato peelings or cornmeal three times a day. This treatment will generally preserve a herd of swine from taking the cholera, even if the disease is in the immediate vicinity.

The following remedy for hog cholera has been very extensively used :

2 lbs. sulphur.	½ lb. saltpetre,
2 lbs. madder,	2 oz. arsenic,
½ lb. black antimony,	2 lbs. copperas.

Pulverize and mix. For hogs that are sick, mix from two to four tablespoonfuls in each pail of swill. As a preventive, one teaspoonful in a pail of swill will keep the disease at bay.

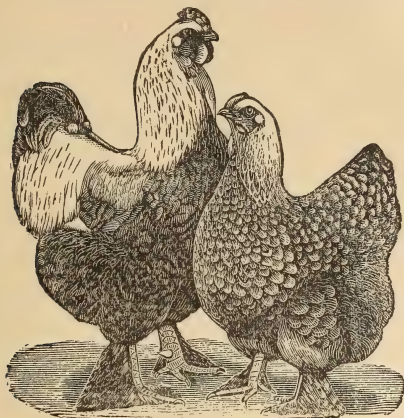
Do not allow hogs, sick or well, to run where there is stagnant water.

AFTER THE ANIMALS HAVE BEEN ATTACKED,

give the following prescription :

Take—Ground ginger, 4 ounces,
Black antimony, 2 ounces,
Flour of sulphur, 2 ounces,
Pulverized nitre, 2 ounces,
Sulphate of iron, 4 ounces.

Mix, and give to a large hog one full teaspoonful three times a day ; to a hog under one hundred and fifty pounds a level teaspoonful, and to smaller ones according to size.



DARK BRAHMAS.

PRACTICAL RULES FOR KEEPING POULTRY.

1. *A little glycerine applied occasionally to the combs and wattles will prevent injury by frosting.*
2. *A great source of contagion is the drinking troughs. Remember this if roup should make its appearance in your poultry house.*
3. *In place of "tonics," drop a nail into the drinking trough and allow it to remain there. It will supply all the "tincture of iron" required.*
4. *If you feed whole corn, place it in the oven and parch it occasionally and feed smoking hot. The fowls appreciate it in the cold, frosty weather.*
5. *A little linseed or oil meal given once a week in the soft feed will promote laying. This will not come under the heading of "dosing the fowls with medicine."*
6. *Do not throw your table scraps into the swill barrel. Give them to the chickens.*
7. *One of the most important points in the keeping of ducks is to give them clean, dry quarters at night. They are very prone to leg weakness and cold, damp quarters.*
8. *Feed your fowls just what they will eat up clean. Fat hens or pullets are poor layers, and the latter is just what you don't want just now, with eggs at 28 and 32 cents per dozen.*

9. *Fowls over three years old are not, as a rule, good for breeders. The males are unable to properly fertilize eggs for hatch-^{ing}, while the stock is usually weak. Four years is generally considered a "ripe old age" for a fowl.*

10. *Each hen, if properly kept, will lay from 200 to 250 eggs a year.*

11. *Liver, and intestines are an excellent food to make hens lay.*

12. *Keep an abundant supply of lime where the hens can easily get at it if you desire your hens to lay well.*

13. *Always clean the nest well and put in fresh straw before the hen begins to sit.*

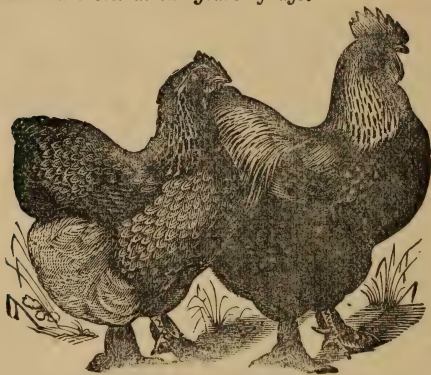
14. *It is best in breeding to cross or mix the breeds more or less every year. It improves the flesh and general health of the fowls.*

15. *Pullets are better layers than old hens. Keep your stock young by disposing annually of the old broods.*

16. *Keep at least one rooster for every eight hens if you desire vigorous young chickens.*

17. *It is a good plan to change roosters every year.*

18. *Roosters are best at two years of age.*



PARTRIDGE COCHINS.

Diseases and Their Treatments.

In North America the climate is very good for all kinds of poultry. There are very few diseases but what readily yield to judicious treatment.

Most of the diseases to which fowls are subject, are the results of neglect, exposure or bad diet.

HOW TO CURE THE CHICKEN CHOLERA.

SYMPTOMS.—The symptoms of chicken cholera are greenish droppings, prostration, and intense thirst. It should not be mistaken for indigestion. Cholera kills quickly, and this is a sure indication.

REMEDY.—The best remedy is to add a teaspoonful of carbolic acid to a quart of water and give no other water to drink. The remedy is not a sure cure, but is one of the best. When cholera puts in an appearance, everything on the place should be thoroughly cleaned and disinfected, the remedy mentioned above being also an excellent disinfectant.

Another Good Receipt.

½ pound madder,
½ pound sulphur,
2 oz. antimony,
2 oz. saltpetre,
¼ pound cayenne pepper.

Mix a tablespoonful in feed for 30 chickens.

ASTHMA.

SYMPTOMS.—The fowls labor for breath, opening the beak often and for quite a time, and sometimes drops of blood appearing on the beak.

TREATMENT.—Take the disease in hand as soon as discovered, keep the fowl warm, and give equal parts of sulphur and butter mixed in fresh butter or fresh lard.

FEVER.

SYMPTOMS.—Restlessness, refusing to eat, drooping wings and excessive heat.

TREATMENT.—Mix a little castor oil with burnt butter, and give a teaspoonful 3 times a day.

LOSS OF FEATHERS.

This disease, common to confined fowls, should not be confused with the natural process of moulting. In the diseased state no new feathers come to replace the old.

TREATMENT.—Keep warm, and feed hemp seed and corn. Add brown sugar to the water.

GAPES.

The Gapes is a very common ailment of poultry and domestic birds. More common among the young than the old.

CAUSE.—The disease is caused by the presence of little red worms, in the wind-pipe, about the size of a small cambric needle.

SYMPTOMS.—Gaping for breath with beak wide open, yellow beak, tongue dry and feathers ruffled on the head and neck.

TREATMENT.—Give a pill each morning made of equal parts of scraped garlic and horse radish, with as much cayenne pepper as will outweigh a grain of wheat, mix with fresh butter.

If a good many are affected, put from five to ten drops of turpentine to a pint of meal.

Treatment must be given in the early stages of the disease, or all remedies will fail.

HOW TO DESTROY AND KEEP RID OF HEN'S LICE.

All fowls are more or less infested with lice. Fowls are sometimes so covered that the natural color of the feathers can not be distinguished. These loathsome vermin will not only cover the fowls, but will multiply and spread over the entire hen-house, barn, wood-shed or any other place, frequented by the poultry.

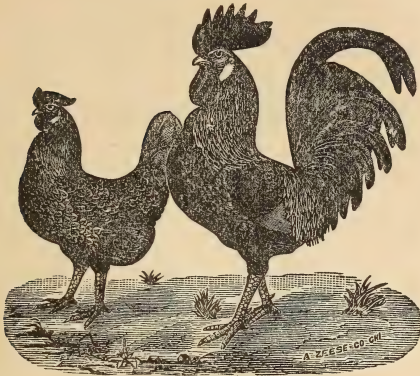
Poultry cannot be fattened when covered with lice.

1. REMEDY.—Whitewash the hen-house frequently, whitewash all the roosting poles, etc., or run them slowly through a fire of old straw or hay.

2. Close the hen-house up tightly and burn sulphur in it. The sulphur fumes will penetrate every crevice and destroy the vermin.

3. Flower of sulphur may be mixed with Indian meal and water, and be fed in proportion of one pound of sulphur to two dozen fowls, every two days.

4. Applying grease of any kind by rubbing it among the feathers is certain death to the vermin.



BROWN LEGHORNS.

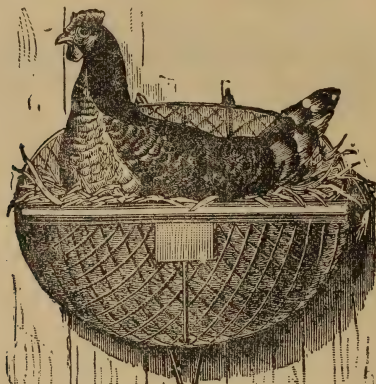
HOW TO PICKLE EGGS.

1. A good, cool place is necessary. The temperature must be kept above the freezing point.
2. Select a good kerosene barrel and take out the head and set fire to the inside and burn it until slightly charred, then smother out the fire by turning it bottom side up. Scrape off charred parts and soak in lime-water until the smell of kerosine is entirely removed.
3. TO MAKE THE PICKLE.—Take one bushel of best fresh lime, one peck of rock-salt, and 60 gallons of clean water, (use similar proportions for smaller quantities.) Slake the lime as for making whitewash, add the rest of the water, and then the salt. Stir well two or three times the first day and then let it stand until well settled and cold.
4. Now dip off the clear fluid carefully and put it into the barrel until about one-half full.
5. Now put in the eggs, without breaking. When you have about a foot of eggs on the bottom of the barrel pour in some of the “milky” pickle made by stirring up the lime and water left. It is these light, fine particles of lime settling on the eggs and filling the pores that preserve the eggs.
6. Care should be taken not to put in too much or too little of the “milky” pickle, pour in enough to cover the eggs

nicely when settled. If not enough lime, the white of the egg will get watery, if too much it will stick on the outside like plaster, and be difficult to remove.

7. A faucet should be fitted into the barrel about six inches from the bottom, so that the pickle can be drawn off when necessary.

8. A common method for small quantities: Take a box or half barrel and first put in a layer of common salt, and then a layer of eggs, and so on, until the desired quantity is packed.



"Poultry Raisers' Egg Food Powder."

(TO MAKE HENS LAY EGGS.)

Red pepper powdered, 2 ounces,
Allspice powdered, 4 ounces,
Ginger powdered, 6 ounces.

Mix them by sifting.

1 tablespoonful to be mixed with every pound of food, and fed 2 or 3 times a week.

Also feed chopped-up fresh meat.

FOR SCALY LEGS

Apply a little kerosene oil once a week. Be careful not to get on too much, or it will blister and injure.

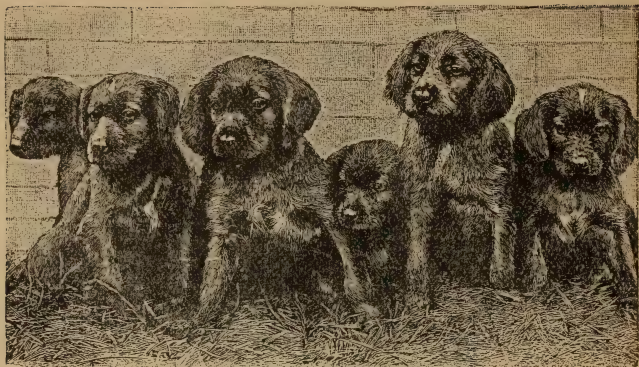


CHICKEN MITES AND THEIR EXTERMINATION.

The above illustration shows the chicken mite greatly enlarged. These are little insects or parasites; the older ones of which are of a darkish gray and the younger ones are a clear whitish color, and are about the size of a pin's head.

These parasites secrete themselves between the cracks and corners of the perches during the day-time, but sally forth to draw the blood of their victims during the night. They accumulate by the thousands and are very destructive to good poultry.

Close the hen-house or whatever place they are found and take a few pieces of brimstone and heat a piece of iron, like a nut or small bolt, red hot and place it into the basin containing the brimstone, and let it consume the brimstone. This smoke will penetrate every crevice in the hen-house and will prove after a few trials very effectual. Then wash the roost or crevices where they are found with kerosene oil, after which put on a good coat of tar; it is also excellent for the roost-poles.



DISEASES OF THE DOG.

1. **Mange.**—Caused by dirty kennel, neglect, want of nourishing, or improper food. *Cure:* One oz. salts, if dog is of moderate size. Rub every third day well into the skin, of the following mixture: Train oil (tanner's oil will do), one quart; spirits turpentine, one large wine glass full; sulphur sufficient to make thin paste; mix well; let it stay on the animal two weeks, then wash well with castile soap and warm water.

2. **To Destroy Lice or Fleas.**—Sometimes the recipe for fleas will prove efficacious, yet not always; but a small quantity of mercurial ointment, reduced by adding hog's lard to it, say an equal quantity, rubbed along the back, never fails; but the greater care must be taken to keep the animal warm and dry. Lard softened with coal oil is a good remedy.

3. **Staggers and Fits.**—This generally happens in warm weather. Throw water on them and slit the ears with your knife just so they will bleed well.

4. **Dog Poisoned.**—Give a teacupful of castor oil; after he has vomited well, continue to pour olive oil down his throat and rub his belly.

5. **For a Green Wound.**—Hog's lard, turpentine and beeswax, equal parts; verdigris, one-fourth part. Simmer over a slow fire till they are well mixed, and apply.

6. **Torn Ears.**—Laudanum and brandy, equal parts; mix well, and apply alternately with sweet oil.

7. **Give Plenty of Water.**—In hot weather always keep water so that the dog can drink at will. It will avoid hydrophobia.

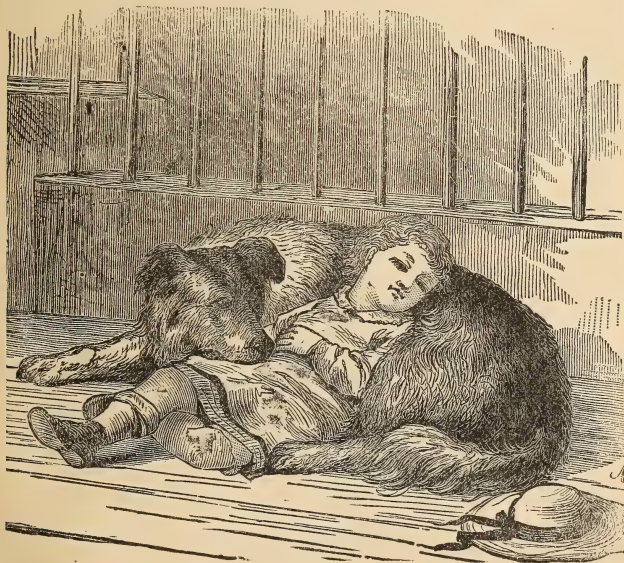
8. **Fleas.**—Scotch snuff steeped in whiskey, is infallible; but must be used with great care, and not above a teaspoonful of snuff to a pint of whiskey, as the cure, if overdone, is a deadly poison.

9. **To Extract Thorns.**—Cobbler's wax bound on the place, or black pitch plaster, or a poultice, are equally good.

10. **Films over the Eyes.**—Bluestone or lunar caustic, eight grains; spring water, one ounce. Wash the eyes with it, letting a little pass in. Repeat this daily, and you will soon cure it.

11. **Physic for Dogs.**—Salts, one ounce; calomel, five grains; or socatrine aloes, two drachms; for moderate sized dog.

12. **Fly Bites on the Ears.**—Common tar, wagon grease taken from the axle, or fresh lard with a little kerosene oil mixed with it.



ALPHABETICAL INDEX.

A		PAGE			PAGE
Abscesses.....		261	Bunions, Cure for.....		207
Accidents and Emergencies....	39	42	Burns, Treatment for. 58, 63, 85,		
Affections of Bowels and Kidneys	48		.....	156, 253, 234	
Affections, Acute and Inflamma-			C		
tory.....		49	Cabbage Worms, How to Destroy	416	
Ague.....	61, 65, 67, 106,	156	Canaries, How to Raise.....	283	
Alcohol and Cigarette Smoking,			Candies, All Kinds of.....	292-294	
Effects of.....		209	Car Sickness.....	252	
Animals We Drink in Water.....		31	Carbuncles, How to Treat.....	92	
Ants, How to Destroy.....	388,	412	Carpet Bugs, How to Destroy....	405	
Apoplexy, How to Cure.....		168	Carpets, Yow to Clean.....	270	
Appetite, Loss of.....		67, 156	Caterpillars, How to Destroy....	417	
Asthma... 49, 50, 58, 64, 68, 100,		156	Cattle and Horse Lice.....	389	
B			Cattle Colic or Hoove.....	485	
Bad Breath, How to Cure....	108,	191	Cattle, How to Doctor.....	484-488	
Balky Horse, How to Manage....		470	Catarrh, Cure for.. 48, 51, 57, 97,	157	
Bandages, How to Make all Kinds	43		Causes of Premature Deaths..	33-35	
Barb Wire Cuts.....	257,	468	Charity, Happiness and Length		
Barrenness and Its Remedy.....		119	of Days.....	37-38	
Bathing, Rules for.....	46, 47,	140	Chapped Hands, For.....	264	
Baths, All Kinds of.....		48, 49	Cheerfulness.....	22	
Beauty, Sensible Helps to.....		179	Check-Rein, Use and Abuse of..	446	
Bed Bugs, How to Destroy.....	388,	408	Chicken Pox.....	153	
Biliousness.....	60, 84,	156	Chicken Mites.....	503	
Birds against Insects.....		386, 387	Chilblains.....	156, 206	
Bites of Spiders. Bee Stings, Etc..	411		Chills.....	59, 106	
Blackheads, How to Cure.....		177	Children, How to Amuse.....	162	
Blacking for Boots and Shoes....		277	Choking.....	42	
Black Leg.....		484	Cholera.....	66, 157	
Black Specks or Flesh Worms....		175	Cholera Morbus.....	107, 157	
Black Tongue.....		484	Chronic Inflammation of Liver..	60	
Bleeding, How to Stop..39, 57, 59,		468	Clothes Moths.....	406	
Bladder, Disorders of.....	62,	66	Cigarette Smoking, Effects of	209, 214	
Bladder, Inflammation of (Cattle)	485		Clover Hay Worms.....	389	
Bleeding from the Lungs.....		65	Coal Gas Suffocation.....	42	
Blistering Liniment.....		467	Colds, Treatment for.. 48, 49, 50,		
Blood Spavin.....		438	57, 58, 60, 61, 62, 65, 66, 68, 97,	253	
Bloody Flux.....		92	Cold Hands and Feet. 50, 51, 52,	207	
Boils, Cure for.....	85,	156	Cold in the Head.....	157	
Bone Liniment.....		438	Cold in the Chest.....	157	
Bone Spavin.....		449	Cold in Children, Good Remedy..	257	
Bots, Treatment for.....		454	Colic... 51, 58, 59, 60, 61, 63, 64,		
Bottle Feeding.....		136	.....	66, 82, 94, 145,	157
Bowel Troubles... 61, 62, 63, 64,		66	Colic in Horses.....	462	
Bowels, Inflammation of (Cattle)..	486		Cockroaches and Croton Bugs	384, 407	
Brain, Inflammation of (Cattle)..	485		Collar Galls on Horses.....	263	
Bridle for Subduing Vicious			Complexion, Pearl Water for....	176	
Horses.....		445	Condition Powder.....	469	
Bright's Disease.....		102	Congestion (of Lungs).... 50, 51,	57	
Broken Breasts.....		264	Consumption.....	67, 69	
Broken Leg of a Horse. How to			Contagious Diseases.....	75	
Set and Cure.....		455	Constipation... 49, 50, 51, 58, 60,		
Bronchitis, Treatment for 48, 52,		156	.....	64, 104, 148,	157
Bruises.....43, 50, 58, 61, 63, 85,			Convulsions.....	126,	157
.....	263, 264,	265	Costiveness.....	66,	157
Bugs, Cucumber, Melon and			Cosmetics, The Best.....	180	
Squash.....		419	Corn Cure.....	206	

	PAGE		PAGE
Corsets, All About.....	185, 189	Fever sores.....	264
Corns on Horses, How to Cure....	453	Felons, How to Cure.....	91
Cowpox.....	485	Feet, How to Take Care of.....	206-208
Coughs. 49, 50, 58, 60, 62, 64, 65,		Fishbone in Throat.....	42
..... 66, 67, 97,	157	Fistula (Horse).....	466
Cough Ball for Horses.....	467	Flatulence.....	51
Cracks in Plaster, How to Fill....	258	Fleshworms, How to Remove.....	176
Cramp.....	63, 94	Fleas, How to Avoid.....	404
Cribbing of Horses.....	460	Flies, How to Destroy.....	410, 411
Croup.... 50, 52, 59, 64, 149, 150,	157	Flowers, How to Keep Fresh....	253
Cracked Heels, (Horses).....	466	Flux or Dysentery (Cattle).....	488
Curb Cure.....	461	Fly Spots, How to Remove.....	259
Cuts or Wounds... 40, 42, 43, 50,		Food, Fat, Muscle and Water	
..... 157, 257, 263, 265, 444,	468	Properties of.....	78
Cyclopedia of Family Receipts... 251		Form and Deformity.....	182
D		Founder.....	458
Debility, General.....	56	Freckles, How to Remove... 62,	177
Delirium Tremens.....	68	Frost Bites.....	93, 264
Delineator, The.....	282	Furniture Washes.....	287
Dehorning Remedy (Cattle).....	47	Furs, How to Clean and Keep	
Dictionary, Medical.....	6, 14	from Moths.....	267, 384
Dying before their Time.....	33, 35	G	
Diarrhoea..... 58, 60, 61, 65,		Galls, Cure for.....	444
..... 67, 88, 147,	157	Gas Well, Death in a.....	74
Diseases, Contagious.....	75	Garden Insects, How to Destroy. 414	
Diseases of Women.....	112-119	Gilt Frames, How to Clean....	260
Diseases of Infants and Children		Glanders.....	468
..... 145-154		Glass, How to Make a Hole	
Diabetes.....	101, 296	Through.....	260
Digestion, Time Required.....	94	Glass Stoppers, How to Remove.. 259	
Diphtheria..... 64, 153, 158		Glue How to Make.... 258, 274,	275
Disposition of the Horse.....	422	Grafting Wax, How to Make....	255
Distemper in Horses, How to Cure 453		Grapes, How to Keep.....	256
Dress, How Ladies Should.....	193	Gravel.....	49, 68, 102
Drinks for the Sick.....	295	Grippe, How to Cure.....	91
Dropsy.....	62	Gout.....	48, 58
Drowning Person, How to Treat.. 73		Gums, Sensitive and Bleeding... 57	
Dogs, Diseases of.....	504, 505	H	
Dyes, All Kinds of.....	276	Hay Fever.....	51, 57
Dysentary. 50, 58, 66, 68, 92, 158,	488	Hair, Loss of.....	180, 198, 203
Dyspepsia, How to Cure.. 50, 56,		Hands, How to Take Care of.....	192
..... 57, 64, 83, 84, 109,	158	Hair, All about.....	194-204
E		Hair Oils and Tonics.....	201, 202
Earache.....	51, 103, 158	Hair, How to Remove Superfluous 199	
Eggs, How to Pickle.....	501	Harvest Mite.....	415
Eggs, Scaly.....	502	Harness and Saddle Galls.....	466
Egg Food Powder.....	502	Halter Pulling.....	472
Emergencies, Unusual.....	42	Halter, The Safest Way to Tie... 482	
Enlarged Joints.....	58	Healing Ointment.....	262
Epizootic.....	453	Healing Salve.....	265
Eruptions of the Skin.....	64	Healthy Homes.....	23
Erysipelas.....	158	Heaves.....	456, 457
Etiquette, Complete.....	226-241	Headaches.... 49, 50, 51, 57, 60,	
Eyebrows and Lashes, Beautiful. 176		..... 87, 88,	159
Eyes, Inflamed and Sore 59, 103, 158		Heartburn.....	64, 65, 95, 158
F		Heart Disease.....	159
Faceache or Neuralgia.....	158	Hives.....	64
Face, Spots on.....	180	Hides, How to Tan.....	279
Family Receipts.....	251	Hidebound.....	458
Falling of the Womb.....	115	Hoarseness.....	62, 66, 159
Fever, 48, 49, 59, 61, 65, 67, 106, 158		Home.....	15-17

	PAGE
Inflammation of the Lungs (Horse).....	456
Influenza (Horse).....	453
Inflammation of Kidneys (Horse).....	461
Inflammation of the Brain (Cattle).....	485
Inflammation of the Bladder (Cattle).....	485
Inflammation of the Bowels and Kidneys (Cattle).....	486
Itch, Cure for (Horse).....	457
Itch and Itching, How to Cure.....	48, 66, 105, 159
Infantile Convulsions.....	126
Infant Feeding.....	126-128
Infants, Care of New-Born... ..	122-143
Ingrowing Nails, How to Cure... ..	208
Inhumanities of Parents.....	168-171
Injury from Rusty Nails.....	93
Ink, How to Make All Kinds.....	272, 273
Ink Stains, How to Remove... ..	62 266
Insects and their Extermination.....	385-420
Invitations, How to Write... ..	220-225
J	
Jaundice.....	84
K	
Kalsomine, How to Prepare.....	259
Kicks.....	263
Kicking Horses, How to Break... ..	475
Kidneys, Inflammation of (Horses and Cattle).....	461, 486
Kidney Troubles.....	62, 69, 159
Kid Gloves, How to Color and Wash.....	267
L	
La Grippe, How to Treat.....	159
Lameness.....	263, 464
Lamps, How to Trim.....	257
Lamp Chimneys, How to Toughen.....	257
Lampas.....	456
Leather, How to Clean.....	482
Leucorrhea.....	114, 150
Lice on Horse and Cattle.....	467
Liniments, Receipts for all Kinds.....	262-264, 467, 438
Lip Salve.....	265
Liver, Inactive.....	159
Liver Complaint.....	65
Liver Disorders of.....	49, 60
Lock Jaw.....	64
Lock Jaw (Horses).....	463
Loss of Appetite.....	67, 156
Lumbago.....	159
Lung Fever.....	89
Lungs, How to Ascertain the State of the.....	96
Lungs, Weak, How to Cure.....	109
M	
Malaria.....	59, 106
Mange Cure.....	457

	PAGE
Matting, How to Clean.....	270
Medical Dictionary.....	6- 14
Medicines, How to Measure... ..	54, 55
Medicinal Plants and Barks.....	56
Measles.....	64, 66 152, 159
Menstruation.....	112, 113
Microscope, Revelations of.....	25
Microbes and Bacteria.....	26, 27
Mites That Infest the Horse, How to Destroy.....	440
Morning Sickness.....	159
Mosquitoes, How to Keep Out... ..	411
Modern Remedies for Insect Extermination.....	388, 392
Moths.....	284, 288, 390, 406, 410
Mucilage, How ts Make.....	275
Mud Fever.....	466
Mumps.....	152, 159
Murrain.....	488
N	
Nausea.....	65
Neck, Scrawny.....	179
Nervousness.....	67, 99
Nervous Debility.....	160
Neuralgia.. 50, 51, 57, 63, 66, 86,	158, 160, 253
Night Sweats.....	68, 107
Nightmare, How to Cure.....	94
Nose Bleeding.....	59, 95, 160
Nursing, Rules for Home....	77, 124
O	
Ointment, How to Make All Kinds.....	261, 469, 487
Ointment for Horses.....	469
Old Looks.....	180
P	
Pain Killer, An Excellent.....	256
Palsy.....	62
Palpitation of the Heart.....	67
Paste, How to Make.....	274, 275
Paints, How to Mix.....	278
Pain in the Stomach.....	67
Perspiration.....	65, 66
Penmanship.....	216-219
Penis, Diseases of (Horse).....	462
Piles.....	49, 50, 107, 160, 261
Pimples.....	59, 60, 176
Pleurisy.....	48, 99, 160
Pleuro-Pneumonia (Cattle).....	488
Plum Curculio.....	389
Plum Weevil.....	417
Poultices, All Kinds.....	44, 45
Poisoning.....	41
Politeness.....	247-249
Portraits and Pictures, How to Enlarge.....	282
Poll Evil.....	449
Poultry Diseases and their Treatment.....	497-503
Prickly Heat, Sure Cure.....	49
Pneumonia.....	89

	PAGE		PAGE
Pregnancy, Duration of.....	118	Snake Bites, How to Cure.....	73
Practical Rules and Receipts for		Sore Breasts.....	115
Carpenters.....	258-260	Stings of Insects.....	160
Pulse, The, at Different Ages.....	72	Sunburn.....	174
Q			
Quinsy, How to Cure.....	108	Shaving, Hints on.....	203, 204
R			
Raspberry Root-Borer and Slug..	389	Smoking Effects, and Cost of 209, 215	
Rats, How to Get Rid of.....	254	Social Duties.....	242, 246
Removing Stains.....	266, 270, 287	Spruce Beer, How to Make.....	252
Redwood Finish, A Beautiful.....	259	Small Pox, Remedy for.....	257
Revelations of the Microscope....	25	Swelling, Liniment for.....	233
Revolutions in the Practice of		Stains, How to Remove All Kinds	
Medicine.....	24	.....	266, 270, 289
Ringbone.....	450	Soap, How to Make All Kinds....	286
Ringworm.....	48, 160	Spraying, All Kinds of Plants,	
Ripe Old Age.....	33	Trees and Shrubby.....	396-403
Rheumatism.....	48, 50, 51, 56,	Spiders, How to Destroy.....	410
.....	58, 62, 66, 67, 98, 160, 264	Strawberry Worm.....	416
Rheumatic Pains.....	63, 66, 98, 265	Squash Bugs, How to Destroy....	419
Round Shoulders, Cure for.....	70	Spavin Liniment.....	438, 449
Rules for Purchasing a Horse....	426	Sweeny.....	444
S		Splint.....	460
Salt, Curative Properties of Com-		Shoulder Joint Lameness.....	448
mon.....	57	Stifle Joint Lameness.....	464
Saddle Galls, Treatment of.....	466	Sore Mouths (Horse).....	466
Scrofula.....	58, 62, 65, 69	Snag.....	468
Scalds.....	58, 63, 85	Swollen Legs (Horses).....	469
Sciatica.....	63	Strength of Horses.....	470
Scarlet Fever.....	66, 150	String Halt.....	478
Scowls, For.....	179	Simple Contrivance for Lifting	
Screw Worms.....	414	Beef.....	490
Scratches, For.....	466, 468	Sheep Diseases, How to Doctor	
Sea-Sickness.....	68	Them.....	491, 492
Self-Sucking Cow, How to Cure..	489	T	
Sick Stomach.....	66	Tan, How to Remove.....	177
Sick Room, Hints and Helps for 79-81		Tail Switching, Sure Remedy for	
Sinks and Drains, How to Purify		.....	442
Silk Wrinkled.....	267	Teeth, How to Take Care of, 190, 191	
Silk, How to Clean.....	269	Teething.....	147
Skin Irritations.....	48	Tender Feet.....	57
Skin, Opening the Pores of the..	48	The Fastest Horse.....	421
Skin Diseases.. 48, 58, 62, 63, 65,		The Noble Horse.....	420, 426
.....	67, 68, 262	Thermometers, How to Test....	256
Shirt Bosoms, How to Enamel....	285	Thumps.....	463
Salves, How to Make All Kinds		Tight Shoes, Effects of.....	208
.....	264, 265	Tight Lacing.....	188
Sunlight and Health.....	18-20	Torpid Liver.....	51
Sunstroke.....	42	Toothache.....	50, 51, 57, 60, 160
Suffocation, Coal Gas.....	42	Tricks, How to Teach Horses....	479
Sores.... 43, 58, 63, 65, 262, 265,		Typhoid Fever, How to Nurse 90,	
Sore Throat... 50, 52, 57, 66, 68,		.....	106
.....	101, 160	U	
Sprains.....	51, 58, 61, 63, 85, 264	Ulcers.....	43, 65, 265, 444
Summer Complaint.....	58-147	Urinary Difficulties.....	160
Sweating, Offensive.....	59	Urine, Incontinence of.....	101
Sore Nipples.....	60	Urinary Troubles in Horses....	466
Sleep, How to Produce.....	61	V	
Sour Stomach.....	64, 67	Varnish, How to Remove Old....	260
Sleeplessness.....	67, 71, 72	Vegetable Caterpillar.....	395
Stimulant, Hot Milk.....	69	Velvet, How to Clean.....	267
		Vomiting.....	57, 60, 64, 65, 86
		W	
		Water as Medicine.....	50-53
		Wash for the Face.....	61

	PAGE		PAGE
Water-Brash.....	67	Wind on the Stomach.....	64, 68
Warts, How to Remove.....	92, 205	Wind Galls, Liniment for... 438, 463	
Warning, A to Mothers.....	139	Wounds.. 40, 42, 43, 58, 59, 157,	
Wall Paper, To Clean.....	266	..... 263, 468	
Waterproof Cloth, How to Make.	267	Worms..... 58, 148, 160	
Water Farcy in Horses.....	448	Worms in Horses.....	450
Weeds, How to Kill Noxious....	255	Worms, Currant and Gooseberry	
Weaning, Time and Necessity of		..... 417, 418	
Weakness General.....	130-132	Wood, How to Polish.....	260
Whitewash, Permanent That Will	67	Womb, Inflammation of.....	114
not Rub Off.....	259, 260	Womb, Falling of.....	115
Whites (Leucorrhœa).....	114	Woman's Woes.....	117
Whooping Cough.....	58, 151, 160	Wrinkles, How to Remove... 176, 180	
Why so Many Children Die.....	130		
Whalebone Restored to Shape....	255		

Y

Yellow Spots, How to Remove... 176	
------------------------------------	--

Index of Cooking Department.

A	PAGE	E	PAGE
Apple Butter.....	370	Egg Lemonade.....	295
Apple Snow.....	303	Egg Dishes New.....	355
		Eggs Boiled and Poached in Milk	302
B			
Beef Tea.....	296	F	
Beets, Baked.....	361	Fish, How to Cook.....	318-320
Biscuits.....	300	Flax-Seed Lemonade.....	296
Boston Brown Bread.....	300	Fritters.....	339, 359, 362
Breakfast Cakes.....	340	Frosting, All Kinds of.....	334-336
Buttermilk.....	296	Fruits, How to Can.....	373
		Fruit Ice.....	303
C			
Cabbage Smothered.....	361	G	
Cakes, How to Make All Kinds		Gingerbread.....	338
..... 324-333		Ginger Snaps.....	338
Candies.....	292-294	Grahams.....	300, 301, 340
Canned Fruits, Caution for.....	305	Graham Gems.....	340
Canning Fruits.....	373	Griddle Cakes.....	301, 340
Carving Fowls.....	316	Gruels, All Kinds of.....	296, 297
Catsups.....	364		
Celery Stewed.....	361	H	
Chicken Broth.....	297	Hominy.....	300
Chicken Stewed with Dumplings	317	Hot Milk.....	297
Codfish.....	320-322	Household Measures and Weights	305
Cookies, All Kinds of.....	357		
Cooking and Housekeeping Hints	304	I	
Corn, New Way of Preparing....	362	Ice Cream.....	256, 357
Corn Bread.....	340		
Cracked or Rolled Wheat.....	298	J	
Crackers.....	301	Jams.....	370
Crullers.....	339	Jellies.....	298, 368, 369
Custard.....	359, 360, 362	Jelly Water.....	295
		Johnny Cake.....	340
D			
Desserts.....	357, 358	L	
Doughnuts.....	339	Lemonade.....	295, 296
Dumplings.....	317	Lobster Cutlets.....	321

M		PAGE	R		PAGE
Marmalade.....		370	Rice Dishes.....		356
Meats, All Kinds.....		306-309	Rice Boiled.....		300
Muffins.....	300, 339, 340		Rice Omelets.....		300
Mush, Different Kinds.....	298, 299		Rice Snowballs.....		299
N			Rice and Raisins.....		299
Napkins, How to Fold.....	376, 382		S		
O			Salads, Different Kinds.....	365, 366	
Oatmeal Tea.....	295		Salad Dressings.....	366, 367	
Oatmeal Snaps.....	301		Salmon Canned.....	319-421	
Omelets.....	300, 302, 353, 354		Sauerkraut.....	363	
Onions Roasted.....	363		Sausages.....	310	
Oranges, How to Eat.....	372		Slaws, Cold and Warm.....	367	
Orange Whey.....	295		Snaps, Different Kinds.....	301, 338	
Oysters.....	303, 320, 321, 361		Soup, Different Kinds.....	297	
P			Sweet Potato Dishes.....	360	
Pie for Dyspeptics.....	303		T		
Pies and Tarts, All Kinds.....	351, 352, 359, 360		Tapioca Milk.....	295	
Pie Plant Baked.....	303		Tarts, Different Kinds.....	352	
Pickled Meats.....	311		Toasts, Different Kinds.....	301, 302	
Pickles.....	365, 367		Toast Water.....	295	
Porridge.....	296		Tea.....	295, 296	
Potato Dishes.....	359		Tomatoes.....	303, 363, 364	
Poultry, How to Cook.....	313-315		V		
Preserves, All Kinds of.....	374, 375		Vegetable Dishes.....	361	
Puddings.....	299, 300, 302, 341-349, 360		Vegetable Oysters.....	361	
Pudding Sauces.....	350		Vinegar, Different Kinds.....	371, 372	
Puffs.....	359		W		
			Wafers.....	301	
			Waffles.....	340	

The Outspoken Truth, in pure, chaste but plain language.

JUST OUT. THE BOOK OF THE AGE.

Search Lights on Health; or, Light on Dark Corners

BY

Prof. B. G. Jefferis, M.D., Ph.D., of Chicago, and Prof. J. L. Nichols, A.M.

A Complete Crative and Sexual Science, or the Proper Relation of the Sexes.

NEW LIGHT ON PRIVATE SUBJECTS:

Adaptation, Conception, Pregnancy and Confinement; Follies of Prevention; Hints and Helps for Young Mothers; The Improvement of Offspring, and Perfect Children.

New Revelations for Women.

Diseases peculiar to men and diseases peculiar to women. New revelations for Women, from the highest medical authority. Wrong practices corrected. Private lectures to young men. The dangerous vices. Safe counsel to young ladies. The road to ruin. Save the boys and save the girls.

It is a Complete Guide.

It shows the prevalence and baneful results of masturbation, and charges parents to be on their guard. It handles without gloves the libertine. It drives the crime of abortion to its true source, and shows the ultimate result. In short, "Search Lights" is an array of facts in condensed form, and a plea for social purity. You will find it beautifully and charmingly illustrated, and imparting information that every man and woman should know.

With over 300 Illustrations. Over 400 pages. 2mo, Silk Cloth, same size as Business Guide.

Price, \$1.00, postage prepaid.

J. L. NICHOLS & CO., 33 Richmond St. W., Toronto, Ont.

AGENTS WANTED.



